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THE MARKET FOR AMERICAN TOBACCO IN THE NETHERLANDS . . .

By P. G. Minneman*

Netherland tobacco manufacturers annually use about 20 million pounds of United States leaf, worth more than $2,500,000. About one-half is flue-cured, one-third fire-cured, and the remainder largely Maryland and Burley. Most of the leaf is purchased by Netherland manufacturers direct from the United States; only about 10 percent is purchased from dealers in the Netherlands. Consumption of cigarettes and cigars has been increasing almost steadily during the past 16 years, but the consumption of smoking tobacco is declining. Prices of tobacco products in the Netherlands are low and have declined sharply since 1930. Tobacco taxes are relatively low, with lower rates on the cheaper products. Competition between manufacturers is severe. As a result, manufacturers resort to lower-quality leaf in order to keep down their production costs.

IMPORTANCE OF THE NETHERLAND MARKET FOR UNITED STATES LEAF

The Netherlands ranks second among continental European countries as a market for American leaf, being exceeded only by France. It ranks first among the continental countries as a market for American flue-cured leaf, second for Western fire-cured and Maryland, and third for Burley. During the past 2 years, the Netherlands imported annually about 20 million pounds of United States leaf, with a value of approximately $2,600,000.

Quantity of United States leaf imported into the Netherlands, average 1937 and 1938

	Million pounds
Flue-cured	9.9
Fire-cured	7.3
Maryland	1.6
Burley	.9
Cigar leaf and other	.2
Total	19.9

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*Tobacco Specialist. London office, Foreign Agricultural Service. Acknowledgment is given to American Consul E. A. Bonnet, Amsterdam, for information contained in his current reports on the Netherland tobacco industry.

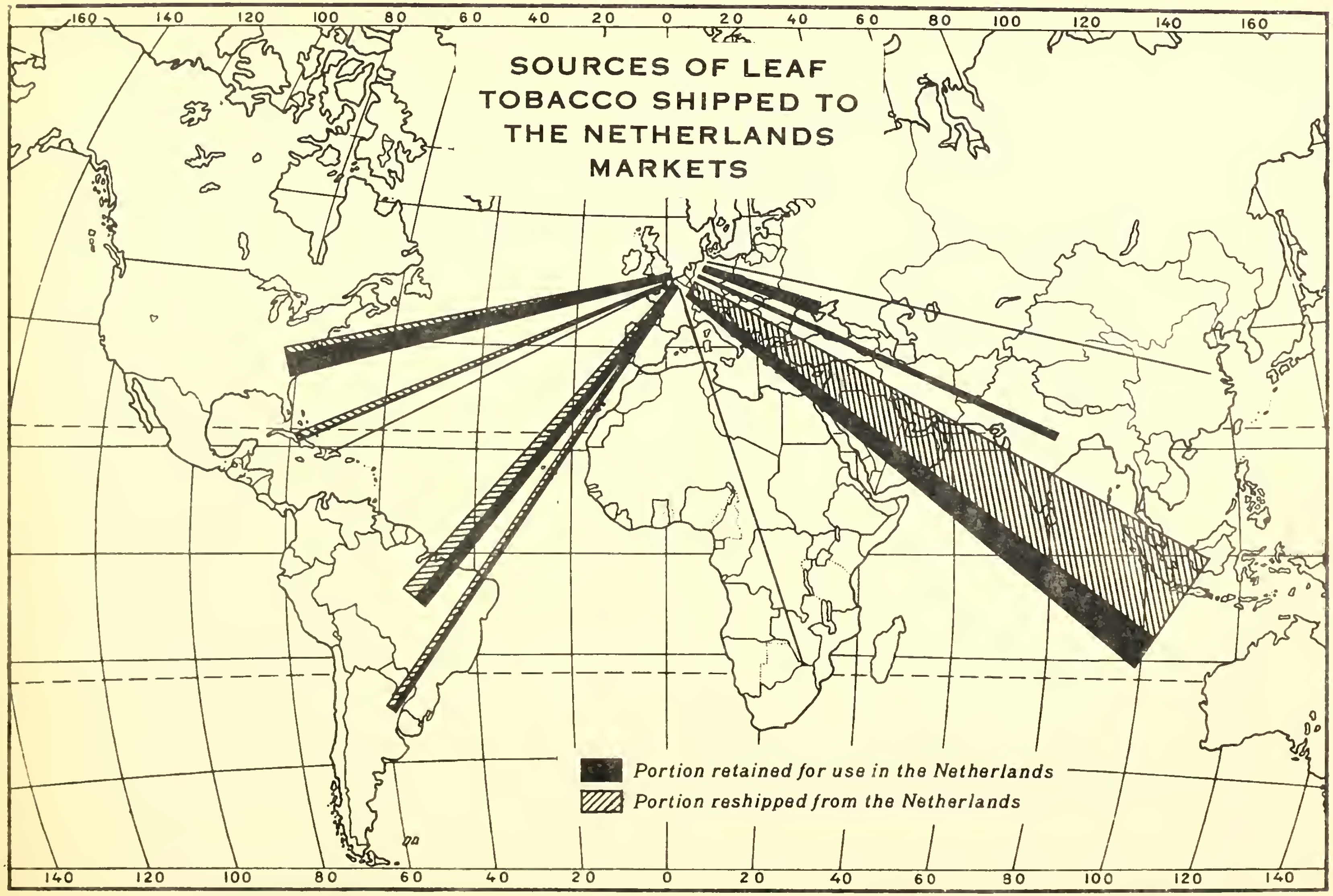
SOURCES OF LEAF TOBACCO SHIPPED TO THE NETHERLANDS MARKETS
Portion retained for use in the Netherlands
Portion reshipped from the Netherlands
160
140
120
100
80
60
40
20
0
20
40
60
80
100
120
140
160

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Fig. 1

Although almost no leaf is now grown in the Netherlands, it constitutes the largest tobacco reselling and reshipping market in the world, with annual receipts averaging 200 million pounds. About 150 million pounds are handled annually through Netherland bonded warehouses, and in addition about 16 million pounds are imported direct by manufacturers. Of this total of 166 million pounds, about 60 percent, or nearly 100 million pounds, are reshipped to other countries and from 66 to 70 million are sold to manufacturers in the Netherlands. In addition, some 30 million pounds annually pass in transit through Netherland ports.

United States leaf does not enter into the reshipping trade to any appreciable extent. Only 2.5 million pounds of about 10 percent of the United States leaf is reshipped to other countries, whereas about 90 percent is used by Netherland manufacturers. Leaf from practically every tobacco-producing country in the world is sold on Netherland markets, both to domestic manufacturers and to other countries. Three-fourths of the reshipments consist of Netherlands Indies leaf from Sumatra and Java. Practically all of this colonial leaf entering world trade is sold on the Netherland auction or inscription markets in Amsterdam and Rotterdam (see "Methods of Buying," page 246).

PRODUCTION

Domestic Production Insignificant

Only from 30 to 50 acres of tobacco, yielding possibly 70,000 pounds, are now grown annually in the Netherlands. Neither the relatively cool climate nor the soil is satisfactory for the production of good-quality leaf, and as a result production has practically disappeared. About 75 years ago, domestic production was considerable. Plantings from 1850 to 1880 averaged about 4,200 acres, with a production of possibly 6 or 7 million pounds, sufficient to fill about 10 percent of the country's leaf requirements. Since then production has been steadily reduced - to about 1,000 acres between 1900 and 1920 and to 42 acres in 1936.

Large Colonial Production

The Netherlands Indies produce annually about 240 million pounds of leaf, of which over 100 million pounds annually, nearly the entire exports, are shipped to the Netherlands for sale over inscription markets. About one-fourth of this East Indian leaf on the Netherland markets consists of Sumatra and about three-fourths of Java.

Sumatra leaf is largely high-quality cigar leaf, used primarily for wrappers. The average price of Sumatra leaf sold over the Netherland markets during recent years has varied from the equivalent of about 60 cents to $1.00 per pound. Only about 3 million pounds, or 13 percent, are used in the Netherlands. The rest is sold to cigar manufacturers all over the world. Germany is the principal consumer and takes about 50 percent; nearly 10 percent (high-priced grades) is shipped to the United States, and about 8 percent to Denmark.

The production of Sumatra leaf declined after the war, but nearly regained its former volume during the prosperity years from 1926 to 1930. Production has since had to be reduced as a result of declining cigar consumption during the period of depression and the loss of much of the market in other countries. Total world consumption of Sumatra leaf from 1921 to 1930 averaged about 37 million pounds annually, but during the past 4 years has declined to a level of 28.5 million pounds. Sumatra is grown by a few large plantation companies, which have absolute control over acreage and therefore are able to adjust output to market requirements.

Java leaf sold on the Netherland markets comprises a wide variety of types of air-cured leaf, partly cigar and partly smoking-tobacco types; small quantities are also used in cigarettes. The names of the different types correspond to the names of the localities in which the leaf is produced, and during recent years the proportion of total sales in the Netherlands represented by different types has been about as follows: Vorstenlanden, from 25 to 30 percent; Besoeki, around 45 percent; Loemadjang, approximately 10 percent; Kediri and Rembang, 10 percent each; and about 1 or 2 percent each for the types Kedoe, Banjoemas, and Madura.

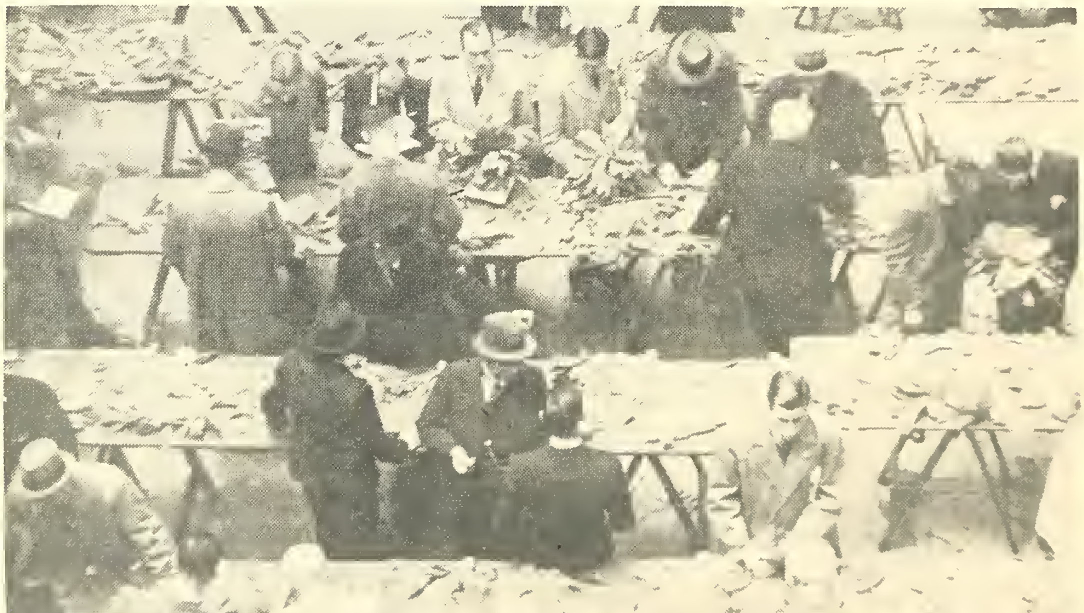

Fig. 2. Buyers from all over the world examine samples of Netherland Indies leaf on the Amsterdam inscription auction markets. (Courtesy A.B.C. Press Service, Amsterdam.)

Vorstenlanden leaf is a cigar-filler and binder type, but the better grades in years of exceptional quality are sometimes used for wrappers. It is produced and exported by a few large estate companies similar to those in Sumatra. Besoeki leaf is of two general types; *viz*, a dark cigar-filler and binder type and a light type used in pipe tobacco and to some extent in cigarettes, which according to American standards would be classified between the light and the dark air-cured types. Both are grown by natives, but all of the fermentation and much of the curing is done by so-called estate companies, which prepare the leaf for export. Loemadjang is considered a strictly pipe-tobacco type. The leaf is somewhat similar in appearance to American light air-cured types. Its production and export is entirely in the hands of a few estate companies. Kediri and Rembang, which are classed together, are primarily pipe tobaccos, but substantial quantities are used in cigarettes. European buyers consider them somewhat comparable with Maryland and other American light air-cured types. They are grown by natives and exported to the Netherlands by independent dealers. Banjoemas is strictly a cigar type, somewhat comparable with lower-quality Vorstenlanden. It is exported by estate companies, and most of it produced by them. Madura tobacco grown on the Island of Madura, is a low-quality, bright-golden-leaf type. It is used primarily for its color in both pipe tobacco and cigarettes It is produced by natives, but export to the Netherlands is in the hands of a few concerns. Kedoe, used in smoking mixtures, is a dark, strong leaf type

Java leaf is relatively cheap. Prices on the Netherland market during recent years averaged from 10 to 13 cents per pound. Vorstenlanden leaf averaged from 18 to 22 cents, Besoeki from 9 to 12 cents, and other types substantially lower.

Total shipments of all types of Java leaf for sale on the inscription markets during recent years amounted to about 75 million pounds annually, of which only about 22 million, or 29 percent, were used in the Netherlands, the remainder being sold to other countries. Germany is still the largest consumer, taking about 40 percent of the total during recent years, with Belgium taking 16 percent, and Denmark 5 percent.

From 1921 to 1930 the average annual consumption of Java leaf outside the Netherlands Indies was about 116 million pounds. During the past 3 years, however, this has declined to only about 76 million pounds, primarily as a result of smaller purchases by Germany. This country imported annually over 75 million pounds of East Indian leaf during the years 1927-1930, but through foreign-exchange restrictions these takings were reduced to only 38 million pounds in 1938.

The continual reduction in Germany's imports of Java leaf has had a demoralizing effect upon the market and has forced prices down, with the result that Netherland manufacturers have been encouraged to use as large a proportion as possible of the cheap Java leaf and to substitute Java for American leaf whenever possible

Flue-cured leaf has also been grown in the Netherlands Indies during recent years, but up to the present time this leaf has been used almost entirely by local manufacturers. Practically none has yet appeared on the Netherland markets Recently, more attention has been given to increasing the production of flue-cured and other light leaf in the hope of substituting such colonial leaf for American in the manufacture of cigarettes in the Netherlands.

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CONSUMPTION OF TOBACCO PRODUCTS

Total consumption of tobacco products in the Netherlands amounted to about 54 million pounds in 1938 and consisted of the following products:

	Million pounds	*Percent*
Cigarettes	12.1	23
Cigars	19.6	36
Smoking tobacco	22.3	41
Total	54.0	100

The people of the Netherlands have always been heavy pipe and cigar smokers. On a per-capita basis, the consumption of tobacco products in the Netherlands is the highest in Europe and one of the highest in the world. With a population of slightly more than 8.5 million, consumption in 1938 was equal to about 6.3 pounds per capita compared with about 7.3 in the United States, 3.5 in Germany, 2.9 in France, and 1.3 in Italy.

Approximate per-capita consumption in 1938

	Netherlands	United States
	Pounds	*Pounds*
Cigarettes	1.42	3.60
Cigars	2.29	1.09
Smoking and chewing tobacco	2.60	2.35
Snuff	-	.28
Total	6.31	7.32

The per-capita consumption of cigars is far greater than that of any other European country and twice that of the United States. Per-capita consumption of smoking tobacco is second only to that in Belgium and is about 50 percent greater than that in the United States. Some of the smoking tobacco is also used for chewing, but practically no snuff is used.

There has been relatively little change in total tobacco consumption in the Netherlands during the past 50 years. It has varied only between 44 and 54 million pounds annually, but there has been a considerable shift in the types of products, from pipe tobacco to cigarettes and cigars. Cigarettes have gained steadily in importance, from less than 5 million pounds annually in the early 1920's to 8 million in 1929 and to 12 million in 1938. Cigar consumption has also increased during this 18 year period, from about 12 million pounds to 19.6 million in 1938.

In addition to the home consumption, Netherland manufacturers have exported between 5 and 8 million pounds of tobacco products annually since 1932. About 97 percent of these exports during recent years have been smoking tobacco, largely to the Netherlands Indies and Africa. Formerly, from 1920 to 1932, the volume of exports was much larger, varying from 9 to 17 million pounds annually, and included larger quantities of cigars and cigarettes.

CONSUMPTION OF TOBACCO PRODUCTS, NETHERLANDS, 1923-1938

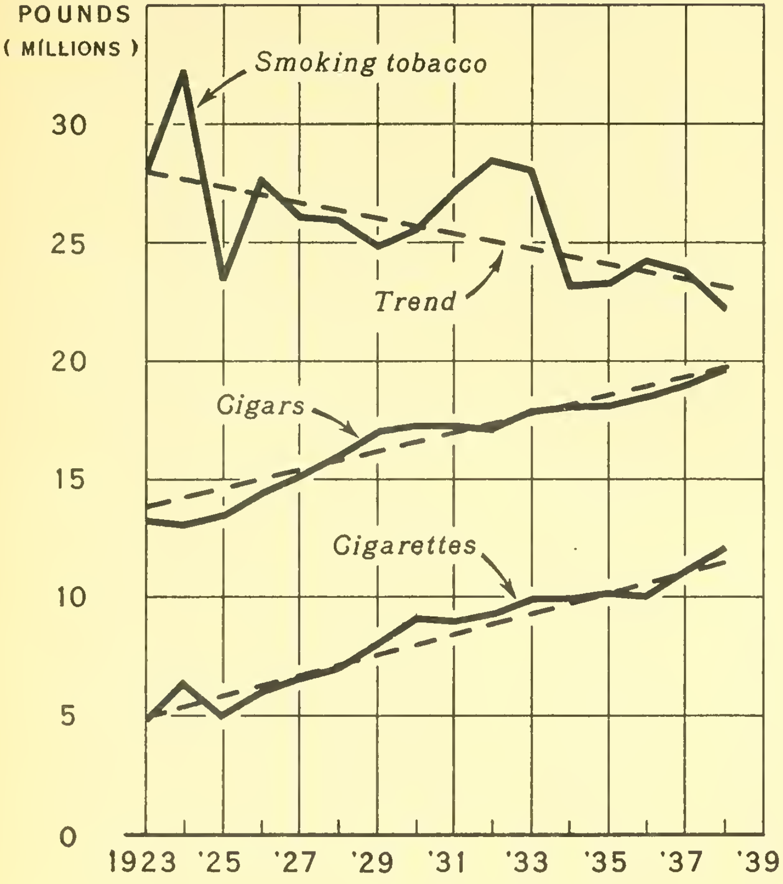

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Fig. 3

CIGARETTE CONSUMPTION AND LEAF REQUIREMENTS, NETHERLANDS, 1930-1938

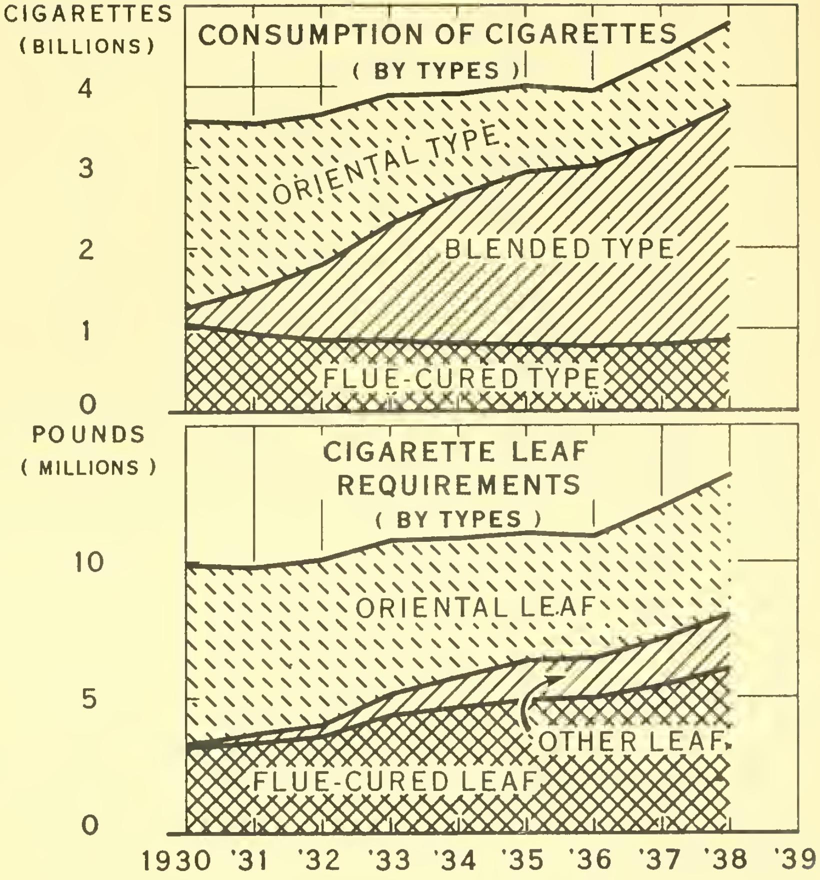

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Fig. 4

Considerable quantities of cigarettes have also been imported from Egypt, the United States, and England, and cut tobacco from England. The latter is used mostly in the manufacture of cigarettes in Holland. Only very small quantities of cigars are imported.

Table 1. Tobacco products manufactured in the Netherlands for domestic consumption and export, 1938

PRODUCT	FOR DOMESTIC CONSUMPTION	FOR EXPORT	TOTAL
	Million pounds	*Million pounds*	*Million pounds*
Smoking tobacco	22.3	6.4	28.7
Cigars	19.6	0.2	19.8
Cigarettes	10.9	-	10.9
Total	52.8	6.6	59.4

The quantities of tobacco products exported are far in excess of the quantities imported; manufacturers thus produce from 3 to 6 million pounds more than is required for home consumption. In 1938, about 59.4 million pounds of products were manufactured compared with total domestic consumption of 54 million. In the case of smoking tobacco, exports exceed imports by between 6 and 8 million pounds annually, and consequently the quantity manufactured is roughly one-fourth larger than that required for domestic consumption. There is now very little foreign trade in cigars. About 1 percent of the total quantity manufactured is exported. On the other hand, about 10 percent of the cigarettes consumed in the Netherlands are imported.

Cigarette Consumption Increasing

About 4,766 million cigarettes were consumed in the Netherlands in 1938, with an average weight of 2.5 pounds per 1,000, or a total of about 12 million pounds. Approximately 1.2 million pounds were imported and 10.8 million manufactured in the Netherlands. Consumption increased rapidly from around 4.5 million pounds in the early 1920's to 9 million in 1930, and since then at a somewhat slower rate to 12 million in 1938 (figure 3). Consumption declined during only 2 of the past 14 years.

About one-tenth of the cigarettes consumed in the Netherlands are imported, primarily from Egypt, the United States, and England. Since 1922, imports have varied from 0.4 to 1.2 million pounds annually and have been increasing almost steadily since 1930. Exports of Netherland cigarettes amounted to about 400,000 pounds annually from 1922 to 1929 but since then, with increased tariffs in importing countries and colonial possessions, particularly in the Netherlands Indies, have declined, amounting in 1938 to the insignificant quantity of 30,000 pounds.

The number and estimated weight of cigarettes consumed, imported, exported, and manufactured during 1938 in the Netherlands were as follows:

	Million pieces	Million pounds
Total consumed	4,766	12.08
Imported	478	1.21
Manufactured for domestic consumption	4,288	10.87
Exported	12	.03
Total manufactured	4,300	10.90

Shift from oriental to blended types - The most important development in the Netherland cigarette industry has been the rapid shift from oriental-type cigarettes to blended cigarettes generally similar to those used in the United States. Most of this shift has taken place since 1930. Before the war, oriental-type cigarettes were most popular, but during the war and immediately afterward the English type of cigarette made entirely of flue-cured tobacco increased in importance, largely because of the scarcity of oriental leaf. But when adequate supplies of oriental leaf again became available, consumption shifted back to the oriental type, which accounted for about two-thirds of the total in 1930. Since 1930, however, the importance of the American-type blended cigarettes containing flue-cured, oriental, and some Burley leaf has increased rapidly.

The shift has been largely at the expense of oriental cigarettes, which are estimated to have declined from about 65 percent of the total consumption in 1930 to 21 percent in 1938 (table 2 and figure 4). Part of the increased popularity of blended cigarettes has been at the expense of English-type flue-cured cigarettes, which are estimated to have declined from approximately 30 percent of the total in 1930 to 18 percent in 1938. This latter shift has not been advantageous to American leaf because it represents a shift from cigarettes made almost exclusively from American leaf to those made partly from other leaf.

Table 2. Estimated percentage distribution of cigarette types in the Netherlands, 1930-1938

TYPE	1930	1932	1934	1936	1938
	Percent	Percent	Percent	Percent	Percent
Blended ...	5	26	47	56	61
Oriental ..	65	50	32	24	21
English ...	30	24	21	20	18

Another indication of the shift in consumer taste in cigarettes is the shift in the type of cigarettes imported as shown by the country of origin. During the 5 years 1927-1931, two-thirds of those imported into the Netherlands were oriental cigarettes from Egypt, with minor quantities from Greece and Turkey (figure 5). Around 20 percent were of the blended type imported from the United States and 5 percent pure flue-cured from England. By 1938, however, the proportion of oriental-type was reduced to 40 percent, whereas the proportion from the United States increased to 32 percent and from England to 26 percent. Imports from the United States and England together are now greater than imports of oriental cigarettes.

CIGARETTES IMPORTED INTO THE NETHERLANDS: NUMBER, TYPE, AND PRINCIPAL SOURCES, ANNUALLY, 1921-1938

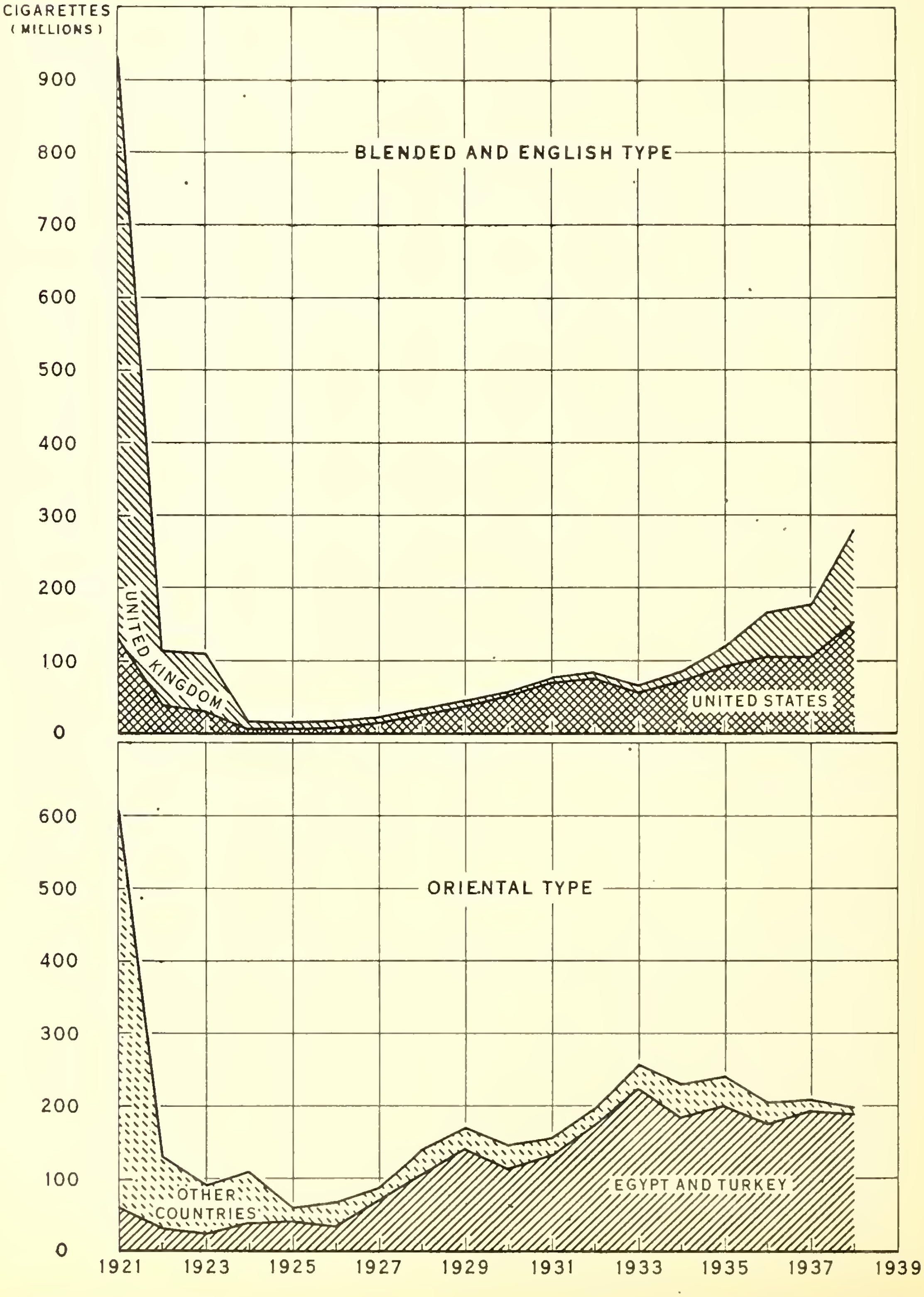

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Fig. 5

Table 2.- Percentage distribution of retail price classes of cigarettes, 1930-1938

Year	Retail price class (Netherland cents) 1/			
	[illegible] AND [illegible] CENT 2/	[illegible]	[illegible]	40 CENT AND OVER
	Percent	Percent	Percent	Percent
1930	[illegible]	[illegible]	[illegible]	41.1
1931	7.1	[illegible]	[illegible]	35.5
1932	20.7	[illegible]	30.9	11.3
1933	37.9	[illegible]	[illegible]	6.1
1934	36.7	[illegible]	[illegible]	7.4
1935	10.6	[illegible]	10.1	4.5
1936	42.3	[illegible]	10.8	3.7
1937	44.2	[illegible]	[illegible]	3.7
1938	47.2	[illegible]	[illegible]	3.1

1/ In Netherland cents. 1 florin = 100 Netherland cents = [illegible] United States cents at average May 1939 rate of exchange. From 1930 to 1938, the average annual exchange rate of the florin ranged between 40.225 (1930) and 67.393 cents (1934).

2/ The 10 cent class division was discontinued in 1935.

The shift in consumption from oriental to blended cigarettes will probably continue, but possibly at a much slower rate than heretofore. Oriental cigarettes now make up only about one fifth of the total, and it is likely that the demand for this type will in time virtually disappear. Any further reduction in the proportion of the English type would be disadvantageous to the United States trade.

Retail-price decline - Another important factor in the Netherland cigarette situation is the continual decline in retail prices. From 1923 to 1931 the annual average retail price of cigarettes varied only from 1.7 to 1.8 Netherland cents each (about 14 United States cents per package of 20). Beginning in 1932, however, the average price dropped rapidly to less than 1.00 cents in 1938 (11.4 United States cents per 20). 1/ (See table 3.)

In part, this price decline resulted from using less expensive oriental-type leaf and in part from rapid declines in leaf prices. Much of the price drop was probably due to the intensive competition between manufacturers and their efforts to maintain sales volume during periods of reduced consumer purchasing power. Nearly one-half of all the cigarettes consumed in 1938 were in the price class retailing at three fourths of a cent each (8 United States cents per 20). Lower retail prices have forced manufacturers to use continually lower quality and lower priced leaf. Manufacturers claim that, in order to make this class of cigarettes, it is necessary to keep the leaf cost of the cigarette mixture down to the equivalent of from 12 to 15 United States cents per pound.

Table 4 shows, approximately, some of the principal cost items entering into the manufacture and sale of cigarettes. It will be noted that selling costs and

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1/ For exchange value of the Netherland money unit, see footnote 1 to table 3.

excise taxes make up more than three fourths of the retail price, leaving less than one fourth to cover leaf cost and all the expenses involved in manufacturing and advertising. For low-priced cigarettes, which make up nearly half of the total, the estimated leaf cost is 33 United States cents per thousand, which is equivalent to about 13 cents per pound of leaf. Relatively few cigarettes, around 12 percent of the total, are sold at prices above the medium price class. Most of the expensive cigarettes are of the oriental type.

Table 4. Estimated cost of production and distribution of Netherland cigarettes, 1938

ITEM	UNIT	PRICE CLASS		
		LOW	MEDIUM [a]	HIGH [b]
Retail price per package of 20	Netherland cents	15	25	35
	United States cents	8.2	13.7	19.2
Proportion of total sales	Percent	47	21	7
Retail price per 1,000	United States dollars	4.12	6.87	9.60
Retailer's commission	do	.74	1.24	1.90
Wholesaler's rebate	do	.35	.60	1.00
Gross to manufacturer	do	3.03	5.03	6.70
Excise tax (50 percent of retail price)	do	2.06	3.43	4.80
Returns after tax	do	.97	1.60	1.90
Leaf cost	do	.33	.60	.80
Remainder to cover all costs of manufacture, advertising, interest, and profit	do	.64	1.00	1.10

a. Another popular price class at 20 Netherland cents per package constitutes nearly 20 percent of the total.

b. Cigarettes at higher prices than this group make up only 3 percent.

Leaf requirements - In estimating the quantities of the several types of leaf used in the manufacture of cigarettes, it may be assumed that oriental cigarettes are made entirely of oriental-type leaf and English cigarettes are made entirely of flue-cured leaf. In the case of blended cigarettes, there is a wider variation in leaf mixtures than in the United States. As in the United States, flue-cured is usually the most important leaf in the blend. The cheaper grades of oriental leaf make up a much larger proportion, however, and Burley a much smaller proportion. Furthermore, several leading brands include small percentages of other kinds of light leaf, such as some of the Java types. It is estimated that the proportion of flue-cured varies from 35 to 50 percent of the mixture in blended cigarettes, oriental leaf from 25 to 40 percent, Burley from 5 to 15 percent, Maryland from 5 to 10 percent, and Java types from nothing to 10 percent.

Blends of the different manufacturers vary widely, but from interviews with numerous manufacturers and members of the trade it is estimated that the following represents a reasonable average of the several types of leaf used in blended cigarettes manufactured in the Netherlands:

	Average percentage
Flue-cured	47
Burley	10
Maryland	8
Oriental	30
Java	5
	100

Data on production and sale of cigarettes in the Netherlands are available only for the number of cigarettes, and it is therefore necessary to estimate the weight, which varies from 21 to 27 cigarettes per ounce or from about 2.3 pounds to nearly 3 pounds per thousand. It is estimated that the average weight of all cigarettes consumed in the Netherlands is about 2.535 pounds per thousand.

Manufacturers estimate that an average of about 2.75 pounds of leaf tobacco is required for the manufacture of a thousand cigarettes. This provides for a loss in weight of from 8 to 10 percent, due primarily to the removal of some of the stems and slightly to the removal of dust and sand. Stems, of course, are not removed from oriental-type leaf and only partly removed from American types. In an effort to reduce the leaf cost as much as possible, manufacturers of the popular lower-priced brands retailing at three-fourths of a Netherland cent each (8 United States cents per 20) commonly remove only the butts of the stems. Sometimes they remove the stems, steam and roll them, and add them again to the mixture.

Estimated on the basis of the assumed proportion of the several types of cigarettes and blends manufactured, approximately 12.7 million pounds of leaf were required in the manufacture of cigarettes in 1938 (table 5). United States leaf is estimated to make up nearly 57 percent of the total and flue-cured alone about 46 percent. The grades of flue-cured leaf commonly used by Netherland cigarette manufacturers are good-to-common leaf, low-to-common leaf, low-to-common orange and off-color cutters, good-to-low logs (including the cheaper darker and mixed colors), and good-to-low orange primings.

Table 5. Estimated quantities of various kinds of leaf required in the manufacture of cigarettes in the Netherlands, 1938

KIND OF LEAF	TYPE OF CIGARETTE			TOTAL
	BLENDED	ENGLISH	ORIENTAL	
	Million pounds	*Million pounds*	*Million pounds*	*Million pounds*
Flue-cured	3.53	2.31	-	5.84
Burley	.88	-	-	.88
Maryland	.58	-	-	.58
Oriental	2.36	-	2.72	5.08
Java	.35	-	-	.35
Total	7.70	2.31	2.72	12.73

During recent years, considerable quantities of ready-prepared cut tobacco have been imported from England for use in the manufacture of cigarettes in subsidiary plants in Holland. Such imports in 1938 totaled about 1.7 million pounds. Most of this cut tobacco is originally made from American leaf, but it should be noted that these imports reduce the total amount of actual leaf required by Netherland cigarette manufacturers.

Cigar Consumption Also Increasing

The consumption of cigars in the Netherlands amounted to about 1,550 million in 1938, or the equivalent of 181 cigars per capita, compared with 43 per capita in the United States. Consumption has increased steadily from 1,033 million in 1924, with increases during all except one of the 14 years to 1938 (figure 3).

Netherland cigars are wrapped rather loosely and tapered at both ends, and consequently are lighter in weight than American cigars. It is estimated that the average weight of all cigars and cigarillos in the Netherlands is now about 12.7 pounds per thousand. This compares with an average weight of from 17 to 19 pounds per thousand in the United States. The total weight of cigars (including cigarillos) consumed in the Netherlands is therefore estimated at 19.7 million pounds. During recent years the average size of regular cigars has been reduced, but the proportion of the total represented by small cigarillos has also declined, with the result that the total weight of cigars consumed has probably not changed greatly. The consumption of cigarillos (weighing less than 6.6 pounds per thousand) is relatively unimportant, making up less than 20 percent by number and less than 10 percent by weight.

Before 1921, cigar manufacturers enjoyed an export market of from 3 to 5 million pounds annually, but with increased tariffs in importing countries from 1921 to 1925 the volume of exports declined to between 1 and 2 million pounds. Since then exports have declined further, until now they amount to no more than 200,000 pounds annually, or about 1 percent of the total quantity manufactured. Imports of cigars are negligible.

The following tabulation shows the number and estimated weight of cigars (including cigarillos) consumed, imported, exported, and manufactured in the Netherlands in 1938:

	Million pieces	*Million pounds*
Total consumed	1,550.0	19.64
Imported	.5	.01
Manufactured for domestic consumption	1,549.5	19.63
Exported	20.0	.25
Total manufactured	1,569.5	19.88

Price declines - Although the consumption of cigars has increased steadily, their total value has declined sharply since 1930 because of the sharp reduction in all retail prices and the shift toward lower-priced brands. (See table 13.) In

1937 there were 2,331 manufacturers making cigars exclusively, in addition to the manufacturers who made several tobacco products. Competition has been severe in an effort to maintain the volume of sales in the face of declining purchasing power. The increased use of machinery in the manufacture of cigars, as well as the shift to smaller sizes and the lower prices for leaf, has done much to make the lower retail prices possible. The greatest volume of sales in full-sized cigars is in the price class retailing at 3 cents each (about 1.6 United States cents). The next most popular price classes are those of 4 and 6 cents. Most cigarillos sell at from 1.7 to 3 cents each.

The average price of all cigars sold in the Netherlands in 1938 was 4.56 Netherland cents and of cigarillos 2.65 cents (together an average of 4.18 cents). This compared with 6.9 cents in 1930 and 7.3 cents in 1923. The most severe price decline occurred after 1930. During the 9 years 1930-1938, while the consumption of cigars increased 14 percent, the total retail value declined 31 percent; from 94.1 million florins in 1930 to 64.8 million florins in 1938.

Leaf requirements - Netherland cigars are made primarily of East Indian and Brazilian leaf and generally have a milder flavor than those made in most other countries. It is estimated that nearly 90 percent of the wrappers are East Indian leaf; that is, about 75 percent Sumatra and 15 percent Java. The remainder of the wrapper probably consists of about 5 percent Brazilian and 5 percent Havana. Binders are primarily Java with a little Sumatra and Brazilian leaf and a very little United States Seedleaf. Fillers are estimated to be about 50 percent Brazilian and 50 percent Java, the latter predominating in the cheaper brands. In addition, small quantities of Dominican and Manila leaf are used.

Stems are largely removed from the leaf used in the manufacture of cigars, and it is estimated that the resulting loss in weight amounts to from 15 to 20 percent. Total leaf requirements for the Netherland cigar industry are estimated at 24.5 million pounds consisting, approximately, of the following kinds of leaf:

	Million pounds
Netherlands Indies -	
Java	10.9
Sumatra	3.0
Total East Indian	13.9
Other -	
Brazilian	9.0
Havana	1.0
Manila	.2
Dominican	.3
United States Seedleaf	.1
Total leaf	24.5

The types of leaf used in the manufacture of cigars have not changed greatly, but there has been a distinct tendency toward the use of more Brazilian leaf, somewhat less high-priced Sumatra, and much less United States Seedleaf. Table 6 shows the average quantities of cigar leaf imported into the Netherlands by 5-year periods since 1926 and during the 3 years 1936-1938. All of these leaf types except Java are used almost exclusively in the manufacture of cigars, and the net imports are therefore the approximate quantities used in manufacture.

Approximately one-half the net imports of Java are used in the manufacture of pipe tobacco. It will be noted that imports of Brazilian leaf have increased from 5 million pounds annually during 1926-1930 to 9 million during the past 3 years. Imports from Cuba have increased from less than 0.6 to 1 million. At the same time, imports of Sumatra have declined from more than 4.6 to 2.9 million and United States Seedleaf from 770,000 to 80,000. It is believed that the use of Java in cigars has increased only slightly.

Table 6. Net imports of cigar leaf into the Netherlands, average 1936-1938 with comparisons

KIND	AVERAGE		
	1926-1930	1931-1935	1936-1938
	Million pounds	*Million pounds*	*Million pounds*
Cigar leaf -			
United States Seedleaf	0.77	0.19	0.08
Manila	.74	.19	.13
Havana	.65	1.31	.95
Sumatra	4.62	4.42	2.89
Brazilian	5.06	6.70	9.05
Total	11.84	12.81	13.10
Cigar and pipe leaf -			
Java a/...............	21.86	23.48	22.30

a/ Roughly one-half of the Java is estimated to be used in cigars.

The only type of United States leaf that is used in cigars is Seedleaf. With ample supplies of low-priced leaf from other countries and severe price competition on the part of manufacturers, the use of Seedleaf has been practically discontinued. It does not appear likely that there will be any appreciable reversal of this trend in the near future.

Smoking-Tobacco Consumption and Exports Decline

Smoking tobacco is the most important single tobacco product used in the Netherlands. Consumption of smoking and chewing tobacco together in 1938 amounted to 22.3 million pounds and accounted for about 41 percent of the consumption of all tobacco products. An additional 6.4 million pounds were manufactured for export, bringing the total to 28.7 million, about 48 percent of the total output in the Netherlands. It is the only tobacco product enjoying any appreciable export market.

Whereas the domestic consumption of cigars and cigarettes has increased materially since 1923, the consumption of smoking tobacco has tended to decrease, especially since the increase in excise taxes. Young people in the Netherlands prefer cigarettes and cigars, and the increased consumption of tobacco by women is practically limited to cigarettes. Furthermore, smoking tobacco is the cheapest of the various tobacco products, and its consumption tends to decline most in periods of prosperity, when smokers shift to the more expensive cigarettes and cigars. On the other hand, during periods of unemployment and relative depression, the consumption of smoking tobacco tends to increase, and larger quantities are used for hand-rolled cigarettes.

Relatively large quantities of smoking tobacco are exported from the Netherlands. The wide variation from year to year in these exports is an important factor in the industry's leaf requirements. Exports declined from about 13.7 million pounds in 1928 and 1929 to less than 5 million in 1934, rose again to 8 million in 1937, and declined to 6 million in 1938 (figure 6).

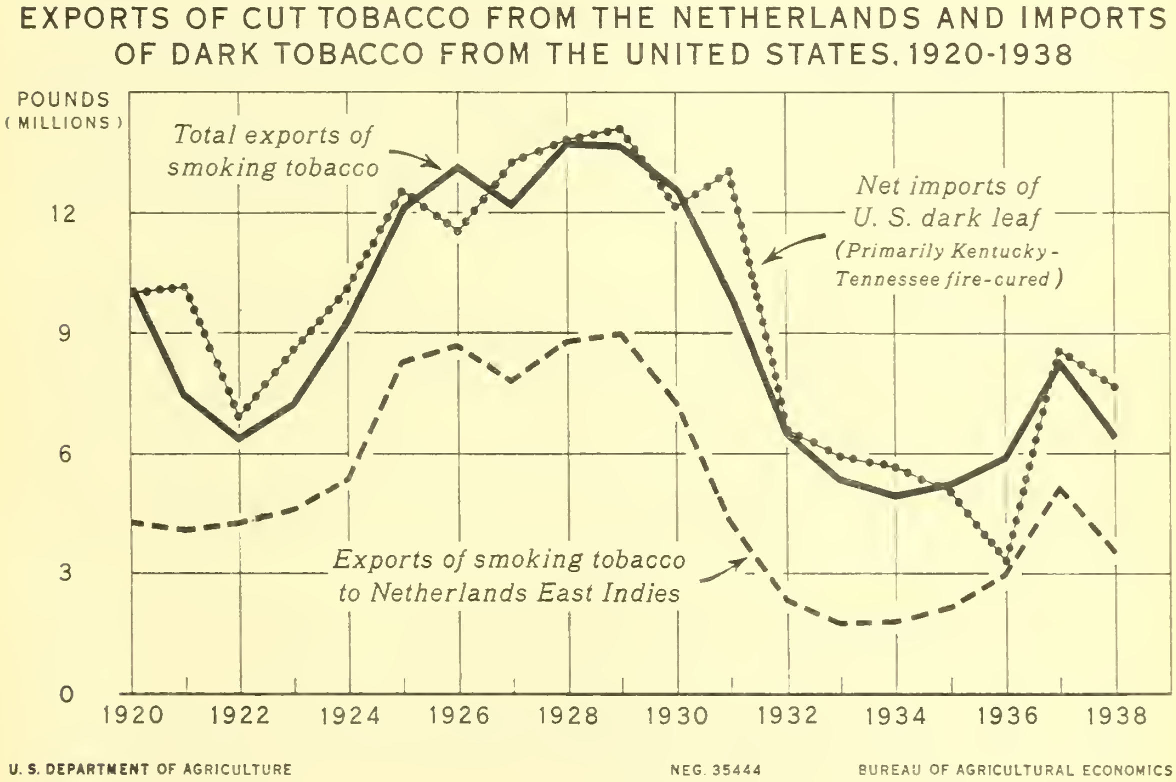

Fig. 6

Most of this variation in export volume is in shipments of dark smoking tobacco to the Netherlands Indies, which take from one-half to two-thirds of the total. From 1925 to 1930, between 7 and 9 million pounds annually were shipped to the Netherlands Indies; but, with increased tariffs, shipments to this market declined to less than 2 million pounds during 1933 and 1934. In 1937, exports revived sharply to 5.2 million pounds but declined again in 1938 to 3.6 million.

Another formerly important market for Netherland cut tobacco is British East Africa, which took from 1.5 to 2 million pounds annually. This trade has now dwindled to only 300,000 pounds. Several European countries are also relatively important. Germany and Denmark together formerly took about 2 million pounds; but, with increased restriction on imports and on sales in the free ports of these countries, their combined takings now amount to only about 1 million pounds, largely of light tobacco. On the other hand, England and Belgium, which formerly took practically no Netherland cut tobacco, together now take about one-half million pounds annually.

Types - Several distinctly different types of smoking tobacco are manufactured in the Netherlands. Formerly it consisted almost entirely of coarse-cut Java leaf for use in the large-bowl clay pipes. More recently, the proportion of this type has declined and the cut has been made narrower for use in the modern small-bowl pipes. It is estimated that roughly three-fourths of the smoking tobacco now consumed in the Netherlands is still of this general type called *Baai*, which is relatively coarse-cut and made basically from Java leaf. The remaining one-fourth is largely fine-cut, or shag, some light and some dark. Dark shag, bird's-eye, and other dark tobacco are made principally from fire-cured leaf and are very important in the export market. The light shags are principally of flue-cured leaf. Small quantities of English-type pipe mixtures and small quantities of twist are also manufactured.

Baai contains from 65 to 90 percent Java leaf from the lower-priced grades of Rembang and Besoeki. The most popular low-priced brands retail at from 5 to 10 Netherland cents per 50 grams (25 to 50 United States cents per pound) and contain about 65 percent Java and 35 percent cheap filler types of leaf, such as Paraguay, Rio Grande, Hungarian, British Indian, and Algerian. The higher-priced brands with a smaller volume of sales are made almost entirely (from 80 to 90 percent) of Java leaf. Java is not well adapted for fine cutting or for absorbing casing. As a result, most of the *Baai* is coarse-cut and unflavored. Some *Baai*, however, is cased and sold in the form of scrap for chewing.

United States leaf is not used in the manufacture of *Baai*, but is used extensively in shag and bird's-eye. Shag is cut in very fine shreds, even finer than for cigarette stock. For this purpose leaf must have good cutting qualities. Light shag is more important in domestic consumption than dark shag. It contains from 70 to 100 percent flue-cured leaf, mixed, where the entire base is not flue-cured, with oriental leaf and Burley. The flue-cured grades used for this purpose are largely low-priced tips and primings of medium to light and off color, with sufficient body for fine cutting. Burley is added if it is available at competitive prices. Much of this light shag is used for hand-rolled cigarettes, and the mixtures therefore approach those used in manufactured cigarettes.

Some of the light shag is also exported, principally to England and Germany, largely for use on ships. Consumption of this type is increasing steadily but slowly. The principal difficulty preventing a more rapid increase is the fact that it cannot compete in price with the extremely cheap *Baai;* and, as long as low grades of Java leaf are available at much lower prices than flue-cured leaf, it is impossible for light shag to be reduced in price to a comparable basis with *Baai.*

Dark shag, bird's-eye, and other dark smoking tobacco are used to some extent in the Netherlands, but are more important in the export market. These products are estimated to contain about 80 percent United States dark types, primarily Kentucky-Tennessee fire-cured leaf, but also smaller quantities of Virginia fire-cured and dark air-cured types. The fire-cured leaf is largely Type 22 from the eastern district of the Clarksville, Springfield, and Hopkinsville area, commonly known as Vanella grades, named after one of the principal manufacturers for the export market. The remaining 20 percent is composed largely of cheaper fillers, such as Java-Besoeki, Paraguay, and Rio Grande.

The products are heavily flavored or cased. Bird's-eye is the name applied to the small circular slices obtained by cutting across a small roll or twist. This shows the concentric rings around the stem in the center and thus gives the appearance of a bird's eye. By far the greater part of the dark smoking tobacco is exported and consequently variations in manufacturers' requirements depend primarily upon export volume.

The following tabulation shows the quantities of Netherland smoking tobacco manufactured, consumed, and exported in 1938, including that used for chewing:

	Million pounds
Consumed domestically	22.25
Exported	6.43
Approximate total quantity manufactured	28.68
Imported cut tobacco, largely used in the manufacture of cigarettes	1.72

About 1.7 million pounds of cut tobacco are imported, but most of this is used in the manufacture of cigarettes in the Netherlands and not as smoking tobacco.

Leaf requirements - It is estimated that the leaf requirements for the Netherland smoking-tobacco industry amount to about 28.2 million pounds.

Stems are removed only from the higher-priced brands, which make up a small part of the total. Most of these stems, together with additional quantities - some imported and some from the cigar and cigarette industries - are used in the manufacture of the low-priced grades of smoking tobacco. Consequently there is no stemming loss in the smoking-tobacco industry. The addition of casing or flavoring material, particularly to the dark tobaccos and to some of the *Baai* used for chewing, results in a net increase in weight of the products above the weight of leaf actually used. In some of the low-priced brands, 125 pounds of smoking tobacco are manufactured from 100 pounds of leaf, whereas in some of the high-priced brands there is a net loss in weight.

Table 7. Estimated manufacturers' leaf requirements for smoking tobacco in the Netherlands, 1938 a/

TYPE OF LEAF	MANUFACTURERS' REQUIREMENTS FOR		
	HOME CONSUMPTION	EXPORT	TOTAL
	Million pounds	*Million pounds*	*Million pounds*
United States - Fire cured b/	1.55	5.30	6.85
Flue-cured	4.08	.44	4.52
Maryland	.75	-	.75
Burley	.22	-	.22
Total United States	6.60	5.74	12.34
Other - Java	10.58	.22	10.80
Paraguay	1.10	.11	1.21
Oriental	1.04	.07	1.11
British Indian	1.04	.06	1.10
Hungarian	.54	-	54
Others c/	1.05	.06	1.11
Total other	15.35	.52	15.87
Total leaf	21.95	6.26	28.21

a/ Including that used for chewing.

b/ Primarily Kentucky-Tennessee types but including Virginia fire-cured.

c/ Including South American, South African, Italian, Rumanian, etc.

Retail-price decline - The price of smoking tobacco has declined appreciably since 1930 - from the level of about 2.35 florins per kilogram to 1.75 florins in 1938 (table 9). The present average retail price for domestic consumption is equivalent to only about 44 United States cents per pound. The price of exported smoking tobacco (not subject to the excise tax) dropped much more drastically - from 2.12 florins during 1927-1930 to 0.93 florins in 1938. This sharp drop of about 56 percent resulted from efforts to counteract the decline in export volume. The present average price of exported smoking tobacco is equivalent to only 23.4 United States cents per pound, and of that to the East Indies, 21.2 cents, whereas the average price of smoking tobacco exported from the United States in 1938 was 61 cents.

Table 8. Estimated cost of production and distribution of smoking tobacco in the Netherlands in 1938

ITEM	RETAIL-PRICE CLASSES		
	LOW	MEDIUM	HIGH
	NETHERLAND CURRENCY		
	Florins	*Florins*	*Florins*
Retail price per kilogram a/	1.00	2.00	3.00
	UNITED STATES CURRENCY EQUIVALENT		
	Cents	*Cents*	*Cents*
Retail price per pound	25.0	50.0	75.0
Retailer's commission	4.5	9.0	13.6
Wholesaler's rebate	2.3	3.7	6.9
Gross to manufacturer	18.2	37.3	54.5
Excise tax (22.5 percent of retail)	5.5	11.0	16.5
Returns to cover cost of leaf, manufacture, etc.	12.7	26.3	38.0

a/ About 26 percent of total consumption is sold at 1 florin or less; 13 percent at 1.20 florins; 11 percent at 1.40-1.80 florins; 30 percent at 2.00 florins; and 20 percent at 2.40 florins and above.

Table 9.- Index of retail prices of Netherland tobacco products and average annual import value of leaf, 1921-1938

YEAR	INDEX OF RETAIL PRICES				IMPORT VALUE PER KILOGRAM							
					CIGARETTE LEAF		SMOKING TOBACCO LEAF					
	CIGARETTES	CIGARS	SMOKING TOBACCO		FLUE CURED	ORIENTAL	KENTUCKY	JAVA	MARYLAND	PARAGUAY	BRITISH INDIA	HUNGARY
			TOTAL	EXPORTED								
					Florins	Florins	Florins	Florins	Florins	Florins	Florins	Florins
1921		-		-	1.42	2.75	1.45	0.72	1.38	0.50	0.37	
1922					1.17	2.48	1.42	0.72	0.93	0.41	0.38	-
1923	105	108	96	-	1.02	2.33	1.45	0.69	0.73	0.54	0.38	-
1924	101	106	98		0.99	2.25	1.06	0.91	0.89	0.62	0.40	-
1925	104	106	103		1.05	2.35	1.35	0.91	0.99	0.59	* 0.34	-
1926	100	103	102		1.02	2.00	1.35	0.77	0.71	0.57	0.33	-
1927	100	100	100	102	0.93	1.83	1.16	0.88	0.64	0.59	0.31	-
1928	100	100	100	102	0.86	1.66	1.28	0.88	0.68	0.59	0.30	0.48
1929	99	100	100	101	0.83	1.67	1.35	0.78	0.68	0.54	0.31	0.42
1930	101	99	100	95	0.81	1.57	1.22	0.77	0.81	0.54	0.27	0.40
1931	101	95	98	82	0.69	1.27	1.13	0.78	0.79	0.43	0.20	0.41
1932	89	85	87	72	0.59	0.97	0.74	0.54	0.58	0.36	0.16	0.34
1933	77	76	83	62	0.54	0.80	0.62	0.48	0.43	0.28	0.16	0.24
1934	66	71	83	54	0.44	0.54	0.55	0.46	0.34	0.26	0.16	0.24
1935	65	66	78	49	0.42	0.47	0.60	0.40	0.32	0.26	0.14	0.17
1936	63	61	76	42	0.43	0.56	0.41	0.38	0.26	0.23	0.15	0.15
1937	62	61	74	41	0.48	0.59	0.63	0.52	0.31	0.23	0.17	0.16
1938	61	60.5	74	44	0.51	0.67	0.64	0.51	0.37	0.26	0.18	0.18

At current rate of exchange the florin is equal to 53.601 United States cents.

From the retail price, manufacturers must allow for distribution costs and an excise tax of 22.5 percent of the retail price, which leaves a return to the manufacturer of about 50 percent of the retail price. From this he must pay the cost of leaf, all manufacturing operations, labor, equipment, packaging, advertising, investment, etc. (table 8). For the popular low-priced brands, the manufacturer has remaining only 12 or 13 cents to pay for the leaf and all manufacturing costs; consequently only the lowest grades of leaf can be used. Prices of the various kinds of leaf and the decline in prices since 1930 are discussed in a later section. (See tables 9 and 12.)

TOTAL LEAF REQUIREMENTS

The total quantity of leaf required in the Netherlands in the manufacture of all products during 1938 was about 65.4 million pounds (table 10). About 1.7 million pounds of this, however, were imported in the form of ready-cut cigarette stock. The actual requirements in the form of leaf were therefore about 63.7 million pounds. In addition, about 1.1 million pounds of stems and scrap are imported annually, but the exports of stems and waste - about 1.8 million annually - exceed imports.

Total leaf requirements are slightly greater than the actual weight of products manufactured because of the removal of some stems and some loss in the form of such waste as sand and dust. Most of the stems are removed in the manufacture of cigars. As for cigarettes, the stems are removed in the manufacture of the higher-priced brands, but generally only the butts are removed for the cheaper brands. In smoking tobacco there is also a wide variation in this respect, and additional stems are added in the cheapest brands.

There is also some variation due to the moisture content. Leaf is imported at from 12 to 15 percent moisture, whereas some of the cheaper brands of smoking tobacco are sold with a slightly higher moisture content.

Sources of Supply

The greatest single source of the Netherland leaf supply is the colonies in the Netherlands Indies, that is, Java and Sumatra (figure 1). Together these supply about 25 million pounds, or 38 percent of manufacturers' total leaf requirements. Practically all the Sumatra leaf and nearly one-half of the Java is used in cigars; most of the remainder of the Java is consumed as smoking tobacco (table 10).

The United States is the second largest supplier with nearly 20 million pounds annually, making up approximately 30 percent of the total requirements. About one half of the United States leaf is flue cured and most of the remainder is fire cured. Nearly two thirds of the United States leaf is used in smoking tobacco and about one third in cigarettes. All of the fire cured leaf and a large part of the other types are used in smoking tobacco. Slightly more than one half of the flue-cured and Burley is used in cigarettes.

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Table 10. Estimated total leaf requirements in the Netherlands, by types, sources, and uses, in 1938

TYPE	CIGARS AND CIGARILLOS	CIGARETTES	SMOKING AND CHEWING TOBACCO	TOTAL
	Million pounds	Million pounds	Million pounds	Million pounds
Netherlands Indies				
Java	10.90	0.35	10.80	22.05
Sumatra .	2.98	-	-	2.98
Total	13.88	.35	10.80	25.03
United States				
Flue-cured a	-	5.84	4.52	10.36
Fire-cured .			6.85	6.85
Burley a		.88	.22	1.10
Maryland	-	.58	.75	1.33
Cigar leaf	.07		-	.07
Total	.07	7.30	12.34	19.71
Other Western Hemisphere				
Brazilian	9.04		.11	9.15
Cuban .	.95	-		.95
Paraguay . .			1.21	1.21
Other	.22			.22
Total	10.21		1.32	11.53
Oriental a				
Greek		2.45	.55	3.00
Turkish	-	1.13	.23	1.36
Bulgarian	-	1.19	.22	1.41
Other		.31	.11	.42
Total		5.08	1.11	6.19
Other types				
British Indian	-	-	1.10	1.10
Hungarian			.54	.54
Other b	.33		1.00	1.33
Total . . .	.33		2.64	2.97
Total all types a . . .	24.49	12.73	28.21	65.43

a Includes the following quantities estimated to be imported in the form of ready-cut cigarette stock Flue-cured 0.88, Burley 0.44, and oriental types 0.37 million pounds

b Includes South African, Algerian, Manila, Italian, Chinese, Rumanian, etc.

South American countries and Cuba are the third largest suppliers with about 11.5 million pounds, or 18 percent of the total. This is primarily Brazilian leaf for use in cigars, but also includes more than a million pounds from Paraguay, about [illegible] million pounds of Havana, and minor quantities from other countries such as the Dominican Republic.

European countries rank fourth, supplying about 7.3 million pounds, or 11 percent of the total. Most of this, at least 6.2 million pounds, is oriental-type leaf - approximately one-half from Greece and the remainder largely from Turkey and Bulgaria. Smaller quantities, largely dark air-cured leaf, are from Hungary, Italy, and Rumania.

Other parts of the world supply around 1.9 million pounds, or 3 percent of the total. Most of this, 1.1 million pounds, is from British India and the rest largely from Algeria, the Philippine Islands, Rhodesia, South Africa, China, and Syria.

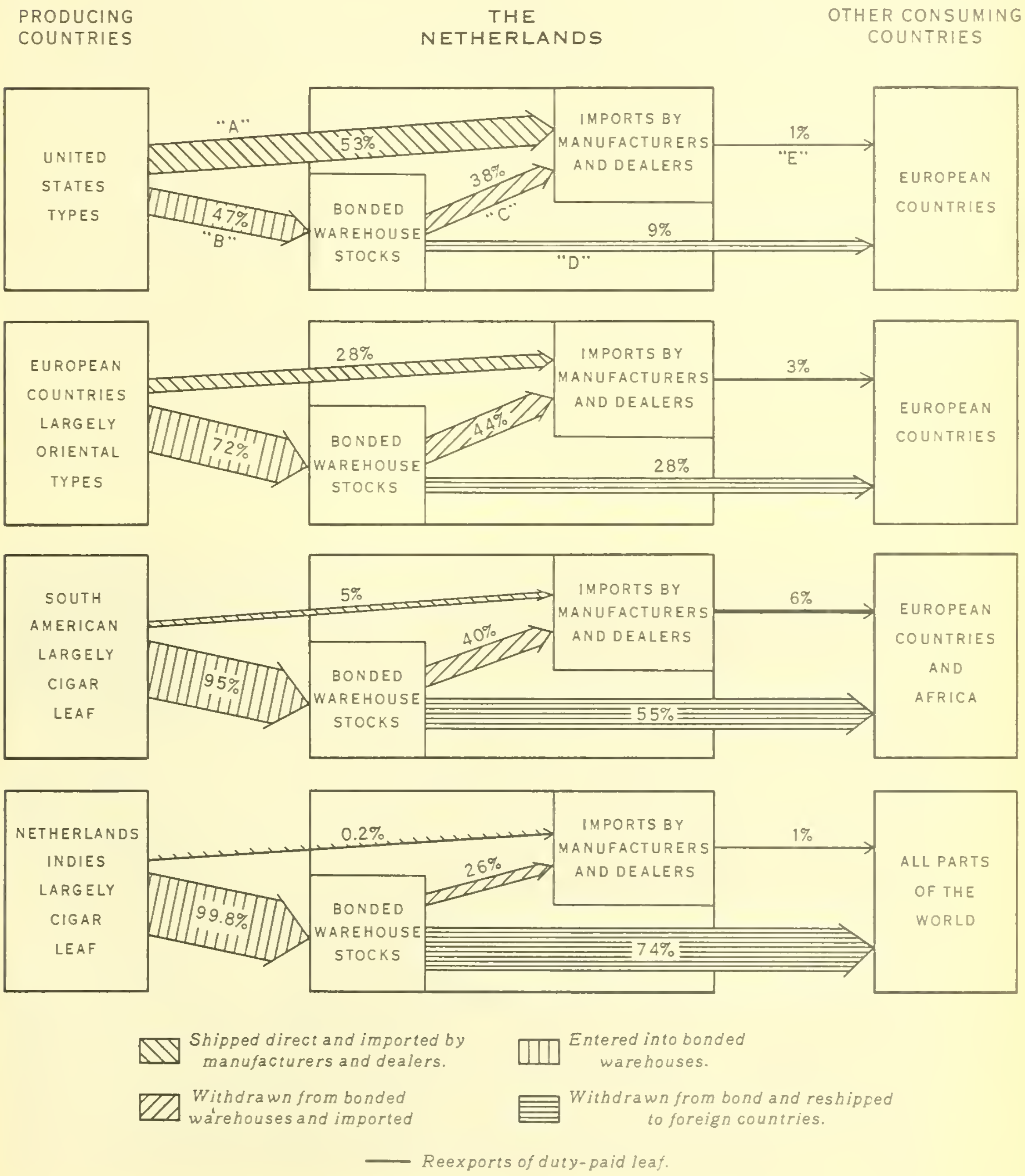
Channels of Trade

Only about 40 percent of the total quantity of tobacco handled on the Netherland markets is actually used by manufacturers in the Netherlands. In other words, more than one and one-half times as much, or nearly 100 million pounds annually, is sold over the Netherland markets for reshipment to other countries. Most of the leaf is handled through Government bonded warehouses, where large stocks are carried and from which deliveries are made both to domestic manufacturers and to other countries. Practically all the deliveries to other countries are handled through bond. About one-third of the Netherland manufacturers' requirements, however, are obtained by direct import without passing through bonded warehouses.

Manufacturers in the Netherlands, as in most other countries, are importing more of their United States leaf requirements direct from the United States and less from dealers' bonded stocks. This tendency is largely the result of manufacturers' efforts to obtain their leaf at the lowest possible cost through direct purchase, thus taking over the function formerly filled by local dealers. During recent years, large manufacturers have increased their factory warehouse capacities.

The channels through which leaf passes on the Netherland markets are illustrated in figure 7. Tobacco shipped to the Netherlands from producing countries either is sent direct to manufacturers ("A" in figure 7) or is entered into bonded warehouses ("B"). In addition, considerable quantities arrive at Netherland ports in transit and are either reloaded on other ships or taken to other countries without reloading. Those in transit shipments are not shown because they do not actually pass through the Netherlands.

Leaf withdrawn from bonded warehouses may be either imported - that is, delivered to Netherland manufacturers or dealers ("C") - or reshipped to other countries ("D") by ocean vessels, by Rhine River steamers, or by rail. The import duty on leaf into the Netherlands is very low, and consequently small quantities are reexported to other countries after the duty has been paid. E



CHANNELS OF LEAF TOBACCO TRADE ON THE NETHERLANDS MARKETS

PERCENTAGE DISTRIBUTION OF TOBACCO SHIPPED DIRECT TO MANUFACTURERS, THROUGH BONDED WAREHOUSES, AND RESHIPPED TO OTHER COUNTRIES, BY KINDS OF TOBACCO, 1936-1938

PRODUCING COUNTRIES
THE NETHERLANDS
OTHER CONSUMING COUNTRIES
UNITED STATES TYPES
"A" 53%
47% "B"
38% "C"
9% "D"
1% "E"
IMPORTS BY MANUFACTURERS AND DEALERS
BONDED WAREHOUSE STOCKS
EUROPEAN COUNTRIES
EUROPEAN COUNTRIES LARGELY ORIENTAL TYPES
28%
72%
44%
3%
28%
SOUTH AMERICAN LARGELY CIGAR LEAF
5%
95%
40%
6%
55%
EUROPEAN COUNTRIES AND AFRICA
NETHERLANDS INDIES LARGELY CIGAR LEAF
0.2%
99.8%
26%
1%
74%
ALL PARTS OF THE WORLD
▧ Shipped direct and imported by manufacturers and dealers.
▥ Entered into bonded warehouses.
▨ Withdrawn from bonded warehouses and imported
▤ Withdrawn from bond and reshipped to foreign countries.
— Reexports of duty-paid leaf.

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Fig. 7

Total imports, therefore, are represented by the total of "A" plus "C," and net imports are obtained by subtracting the reexports ("E"). Changes in bonded warehouse stocks are indicated by comparing entries "B" with withdrawals "C" plus "D."

It will be noted that the proportion handled through bonded warehouses varies widely with the different kinds of leaf. As for United States leaf, over one-half of manufacturers' requirements are now imported direct Of that handled through bond, about 80 percent is delivered to Netherland manufacturers and 20 percent reshipped to other countries. There is also considerable difference as between the types of leaf. From one-half to two-thirds of the flue-cured, Maryland, and Seedleaf is handled through bonded warehouses; but fire-cured leaf is largely imported direct; only about 7 percent is through bond and 93 percent direct by manufacturers

Cigar leaf, on the other hand, particularly Netherland East Indian (figure 7), as well as Brazilian and Cuban, is practically all handled through bonded warehouses and withdrawn by manufacturers from time to time as required. Bonded warehouse stocks of cigar leaf are always large, and manufacturers can usually obtain the grades required Furthermore, most cigar manufacturers have small enterprises not well equipped to import direct or to carry large stocks. Three-fourths of the Netherland Indies leaf withdrawn from bond is shipped to other countries.

Of the other kinds of leaf, a large percentage of that used by the large cigarette and smoking-tobacco manufacturers is imported direct, as is oriental leaf; whereas cigar types, such as South American, including Brazilian, are largely handled through bond.

Tobacco is officially recorded as imported into the Netherlands only when the duty is paid, either when the leaf is withdrawn from the bonded warehouses or when it is imported direct. Import statistics, therefore, do not necessarily agree with the statistics on exports from the United States to the Netherlands (even aside from the time lag incidental to ocean transport), nor do they show accurately the quantities of the various types of leaf held in the Netherlands at any one time because a large part of the leaf is held in bond from 1 to 2 years until manufacturers are ready to import and use it.

Methods of Buying

Formerly Netherland dealers supplied a large part of the manufacturers' requirements of United States leaf, but it is estimated that now only about 10 percent of such requirements are so handled. Large cigarette and smoking-tobacco manufacturers buy practically all their United States leaf direct from the dealers in the United States. The Netherland dealers' principal business is to supplement grades of which manufacturers are deficient, provide leaf to small manufacturers, and handle occasional bargain offers Dealers play an especially important part in selling to a wide market in other European countries.

As for leaf from the Netherlands Indies, the situation is reversed in that over 99 percent is handled by brokers on the inscription markets in the Netherlands

This holds true both for leaf for domestic manufacturers and for delivery to other countries. Of the other types of leaf, such as South American and oriental, it is estimated that manufacturers fill more than three-fourths of their requirements through direct purchase.

Netherland importers estimate that the cost of shipping leaf from the United States to factories in the Netherlands is about 0.9 United States cent per pound, including freight and handling charges. In addition, manufacturers must pay an import duty equivalent to 0.35 cent per pound.

Practically all the Sumatra and most of the Java leaf that enters the world market is shipped to the Netherland bonded warehouses and sold on the Amsterdam and Rotterdam sealed-bid auctions, called inscriptions. After sufficient quantities of the crop have arrived in the Netherlands, the sales are held once a week until the entire crop has been sold. Sales usually start in February and end in July with two or three additional sales in October to take care of late arrivals.

Sales are arranged by the brokers and the producing companies. Samples are drawn at random from approximately 1 out of every 10 bales, and these samples are placed on view in the auction room, while the tobacco itself remains in bonded warehouses. One sale is held each week. One-third of the samples are placed on view on Monday, another third on Tuesday, and the remainder on Wednesday. On Thursday, samples of all lots are again on view, before the actual sale takes place on Friday morning.

Fig. 8. Dealers learn who had the winning bid. (Courtesy A.B.C. Press Service, Amsterdam.)

SEASONAL VARIATION IN LEAF MOVEMENT TO THE NETHERLANDS: PERCENTAGE DISTRIBUTION, BY MONTHS, AVERAGE 1935-1938

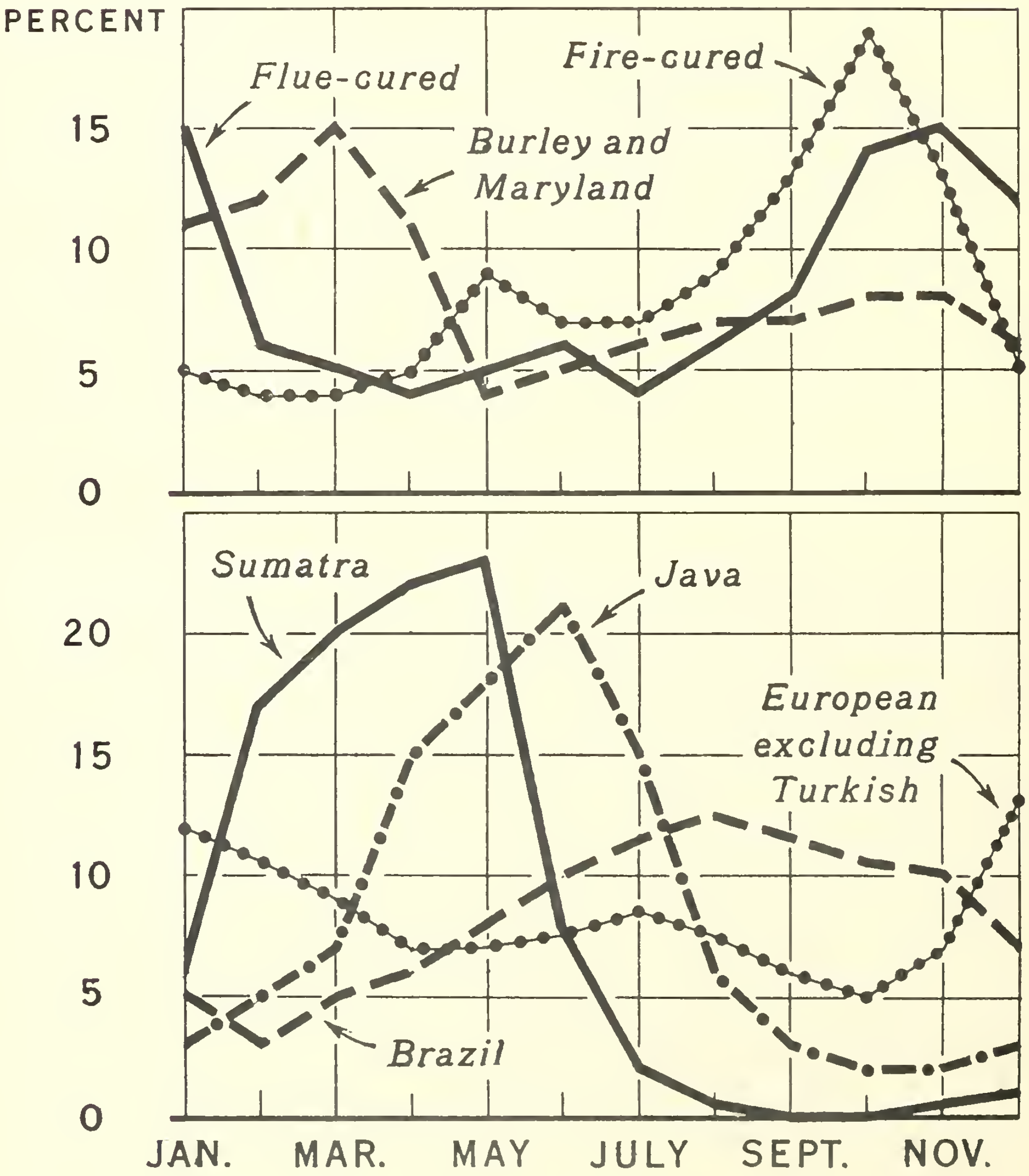

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Fig. 9

Catalogues are prepared for each sale, listing the lots and the grades in each lot or parcel. The size of each lot varies from a few bales to a thousand bales. All buyers must place their sealed bids before a specified time on Friday morning. Bids are then opened and the names of the winning bidders announced.

Since the lots or parcels are relatively large and each contains numerous grades of leaf, the buyers frequently wish to resell certain grades that are unsuitable for their purposes. This is done through the so-called second-hand sales on the auction floor immediately after the name of the winning bidder is announced. The process results in a lively rush and scramble of dealers to get to the winning bidder when his name is announced and to try to buy from him the grades in which they are interested.

The situation is further complicated by the "American" parcels, which are those containing high-priced grades suitable for American manufacturers. In order to dispose of the remaining unsuitable grades from American parcels, arrangements are made for dealers to place their bids for the "rests" in advance of the actual inscription sale, so that each bidder for American parcels may know what price he will be able to obtain for the grades he has to resell.

A uniform brokerage fee of 1 percent is charged for all tobacco sold through the inscriptions. All sales must be made through brokers, who in turn are not permitted to purchase for their own account. Only Netherlands Indies leaf is sold through the inscriptions.

Seasonal Variation in Shipments

Manufacturers' leaf requirements are fairly constant throughout the year, but shipments to the Netherlands vary widely from month to month. Figure 9 shows the proportion of the several types of leaf shipped each month. Flue-cured leaf is shipped largely in the fall, from September to January following harvest. Some of the fire-cured leaf arrives in May, but the heaviest shipments are from August to November, at least 6 months after the marketing season in the United States. Most of the Burley and Maryland is shipped during the late winter.

Netherlands Indies leaf arrives during the late winter and spring. Sumatra is first to arrive in heavy volume, from February to June, and is sold soon afterward on the inscription markets. Java arrives a little later, from March to July, and is also sold immediately on the spring inscriptions. Late arrivals are held over to be sold at the second set of smaller inscription sales in the fall. Most of the Brazilian leaf arrives in the late summer and fall, and oriental types from the Near East throughout the year.

Size of Stocks

Most of the tobacco stocks in the Netherlands are held in Government bonded warehouses, but considerable quantities are also held in factory warehouses. Manufacturers commonly carry several months' supply in their own factory warehouses, although this varies widely from small supplies in the case of cigar manufacturers to relatively large factory stocks in the case of United States leaf for cigarette and smoking-tobacco manufacturers. Based on estimated average factory supplies of one-half year for United States leaf and of 2 or 3 months for other kinds of leaf, total factory stocks are estimated to amount to about 22 million pounds (table 11).

Stocks of all kinds of leaf held in Government bonded warehouses probably amount to more than 100 million pounds. This would be sufficient for between 1 and 2 years' supply for domestic manufacturers, but allowance must be made for the fact that approximately two-thirds of the quantities withdrawn from bond are reshipped to other countries. The total quantity of all kinds of leaf moving through bonded warehouses during the past 3 years varied from 140 to 160 million pounds annually, of which only about one-third was used by domestic manufacturers.

Bonded stocks of United States leaf in the Netherlands during recent years are estimated to have varied between 6 and 10 million pounds, equivalent to from one-third to one-half year's supply for manufacturers, but part of this leaf is shipped to other countries.

Bonded stocks of Netherlands Indies leaf are very large when compared with manufacturers' requirements because most of this leaf is reshipped to other countries. The quantities withdrawn from bond during the 3 years 1936-1938 varied from 97 to 103 million pounds annually, and stocks probably amount to about a year's supply.

Table 11. Imports, bonded-warehouse movement, and estimated stocks of United States leaf in the Netherlands, average 1936-1938

TYPE	TOTAL IMPORTS a/	IMPORTED DIRECT INTO NETHERLANDS	WITHDRAWN FROM BONDED WAREHOUSES			ESTIMATED AVERAGE STOCKS	
			TO THE NETHERLANDS	TO FOREIGN COUNTRIES	TOTAL	IN BONDED WAREHOUSES	IN FACTORY WAREHOUSES
	Million pounds	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*	*Million pounds*
Flue-cured ..	9.33	3.46	5.87	1.35	7.22	6.0	4.0
Fire-cured ..	6.41	5.41	1.00	.08	1.08	1.0	5.0
Burley	.27	.11	.16	.02	.18	.3	.1
Maryland	1.92	1.04	.88	.09	.97	1.0	1.0
Seedleaf	.17	.05	.12	.06	.18	.2	-
Total	18.10	10.07	8.03	1.60	9.63	8.5	10.1

a/ Including unimportant quantities resold after importation or otherwise listed as exports, but not including shipments from bonded warehouses to foreign countries. These shipments virtually make up the principal reexport trade of the Netherlands.

FACTORS AFFECTING THE DEMAND FOR UNITED STATES LEAF

The principal factors causing variations in the amount of United States leaf used in the Netherlands fall into two broad, but closely interrelated, groups; namely, (1) changes in the volume of consumption and in the types of products manufactured both for domestic consumption and for export, and (2) changes in supplies and prices of United States leaf compared with competitive types. For the purpose of analysis these factors may also be enumerated as follows:

1. Short-time or cyclical changes in consumption during periods of depression and prosperity.
2. Long-time changes and trends in volume of consumption.
3. Long-time shifts in taste and type of products.
4. Changes in prices and supplies of competitive leaf.
5. Changes in prices of manufactured products.
6. Changes in taxation and other Government and trade policies.

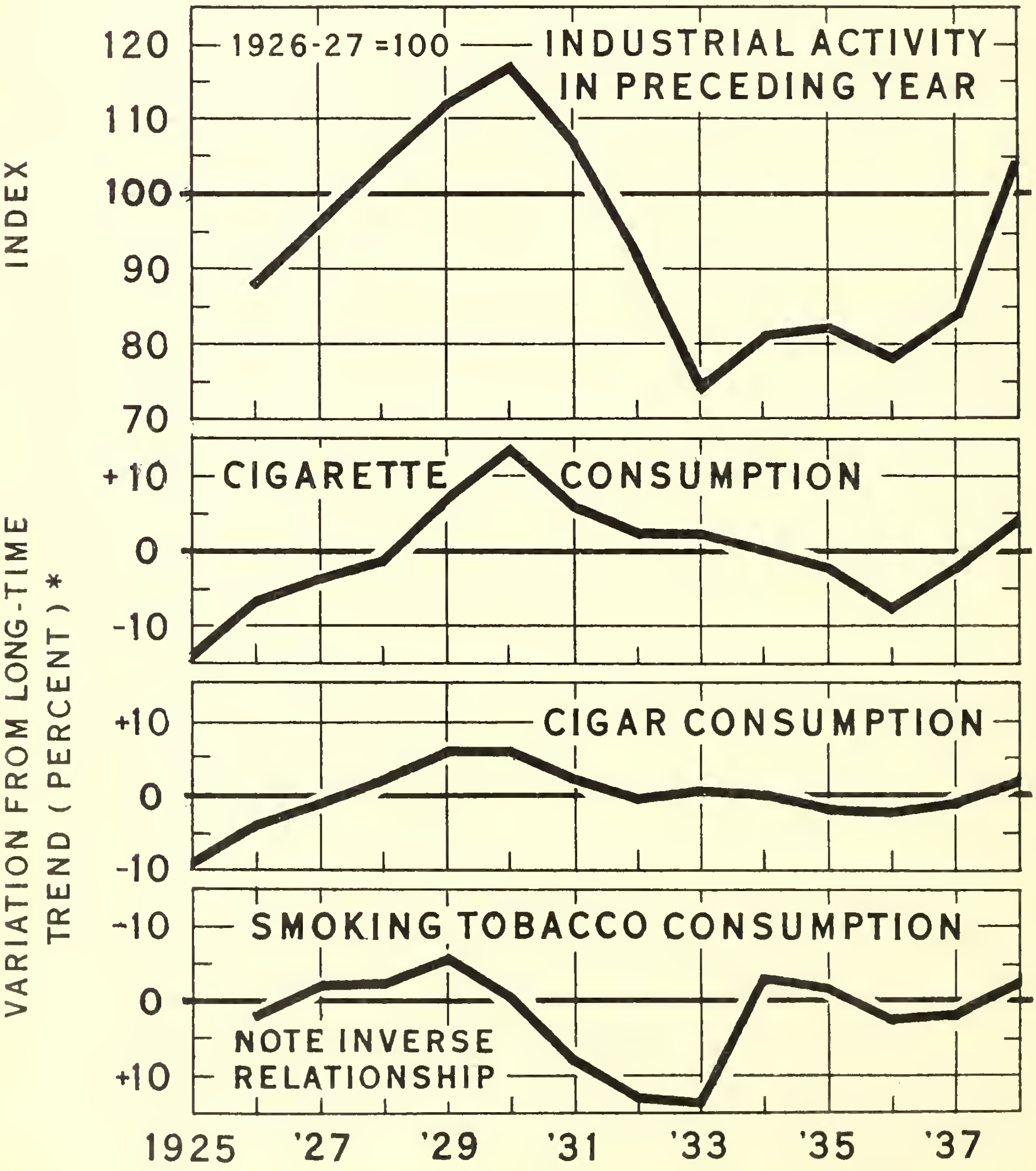
Short-time Trends in Consumption

Consumption and industrial activity - The volume of consumption of tobacco products and therefore of the leaf itself varies with consumer purchasing power. All tobacco products, however, do not react in the same way. Cigarettes and cigars, being relatively more expensive, fall in the "luxury" group, whose consumption increases most rapidly during periods of prosperity and decreases during depressions. Smoking tobacco, on the other hand, is the cheapest tobacco product and reacts in a directly opposite manner. When consumers have less money to spend on tobacco, they shift from cigars and cigarettes to pipe tobacco, and also from manufactured cigarettes to hand-rolled cigarettes made from fine-cut smoking tobacco.

Figure 3 shows the variations in consumption of each of the tobacco products and the long-time trends since 1923. Figure 10 shows the extent of the variations from the long-time trend expressed as a percentage above or below the base trend. It also shows the relationship of these variations to the index of industrial activity during the preceding year. Variations in consumption lag from 6 months to a year behind industrial activity largely because of the fact that manufacturers do not have to pay the excise or banderole tax, upon which consumption data are based, until 6 months after the stamps are actually used.

It will be noted from figure 10 that in 1926, when the preceding year's industrial activity was 12 points below that of the base period (1926-1927 = 100), cigarette consumption was about 7 percent and cigar consumption 4 percent below the long-time trend. When industrial activity rose to 117 in 1930, cigarette consumption was 14 percent and cigar consumption 6 percent above the long-time trend. Industrial activity decreased rapidly between 1930 and 1933 and remained low until 1937-1938. Consumption of cigarettes and cigars also declined, but less rapidly. During this period, leaf prices dropped and manufacturers greatly reduced the prices of their products in an effort to maintain sales.

TOBACCO CONSUMPTION IN THE NETHERLANDS: VARIATION FROM LONG-TIME TREND AS RELATED TO PRECEDING YEAR'S INDUSTRIAL ACTIVITY, 1925-1938



*SEE FIGURE 4

U. S. DEPARTMENT OF AGRI. NEG. 35447 B. A. E.

Fig. 10

It will be noted that the consumption of smoking tobacco tended to vary inversely with industrial activity. Consequently, the variations are shown on an inverted scale in order to picture the relationship more accurately. Exports of smoking tobacco (figure 6) also varied with industrial activity, but in this case the relationship was direct. As the countries that import smoking tobacco became less able to purchase imported products, they turned to the cheaper home grown leaf.

In terms of leaf, the variations in consumption of cigarettes from the extreme high above the trend in 1930 to the low point in 1936 amounted to about 21 percent. With an estimated average annual consumption during this period of 4.3 million pounds of flue-cured leaf in cigarettes, this variation amounts to about 900,000 pounds. Yet, the effect of the short-time variations in cigarette consumption on leaf requirements has been completely overshadowed by several other factors; namely, the long-time increase in consumption and the shifts in type. Furthermore, when the use of flue-cured tobacco in cigarettes fell below normal, its use in smoking tobacco increased.

Demand for fire-cured leaf and exports of cut tobacco - For fire-cured tobacco, the most important factor is the volume of exports of smoking tobacco, since the latter is made largely of fire-cured leaf and relatively little of this type is used domestically. Figure 6 shows that since 1920 the imports of United States dark types (chiefly fire-cured) have varied closely with the volume of exports of cut tobacco. Fully 75 percent of the variation in these exports, in turn, depends upon one market, the Netherlands Indies. During the years from 1928-29 to 1933-34, total exports of cut tobacco fell from 13.7 to 5.2 million pounds. About 7.1 million pounds of this decline was in exports to the Netherlands Indies. Total exports of smoking tobacco doubled from 1921 to 1928-29 and so did imports of dark tobacco from the United States. Five years later, exports of cut tobacco had declined 62 percent from the 1928-29 level, and imports of fire-cured leaf had dropped 58 percent. Subsequently, in 1937, both rose again sharply, but declined in 1938.

The market requirements of fire-cured tobacco, therefore, are subject to very wide fluctuations. The drop in exports of cut tobacco was primarily responsible for a loss in market of about 7.5 million pounds of fire-cured leaf from 1929 to 1933 - a drop to about half the former level.

Long-time Trends in Consumption

Increased cigarette and cigar leaf - Data on the consumption of individual products first became available in 1923. Since then, the consumption of cigarettes and cigars has increased almost steadily (figure 3). During these 16 years there were only 2 years in which the consumption of cigars, and only 3 in which that of cigarettes, failed to increase. During the entire period the consumption of cigars increased 42 percent and that of cigarettes 127 percent. This amounts to an average increase of 2 percent a year in cigars and about 4 percent a year in cigarettes.

On the basis of present blends and types of cigarettes, this would be equivalent to an increase of about one-half million pounds of all kinds of cigarette leaf annually, of which about one-fourth million pounds would be flue-cured leaf. Cigar-leaf requirements have also increased one-half million pounds annually, but these do not include any appreciable quantities of United States leaf.

Two other factors that must be taken into consideration as affecting leaf requirements for cigarettes are imports of manufactured cigarettes and imports of cut tobacco for use in manufacturing cigarettes in the Netherlands. The volume of imported cigarettes, less than 250,000 pounds in 1930, doubled in 1938 and now is equal to 10 percent of total cigarette consumption. Manufacturers' leaf requirements, of course, are reduced by the increased imports of manufactured cigarettes.

Of even greater importance is the quantity of imported cut tobacco in the form of ready-prepared cigarette stock. In 1930, only about 26,000 pounds of cut tobacco were imported, but in 1934 imports suddenly rose to nearly 1 million pounds and increased to 1.72 million in 1938. Practically all of this cut tobacco is imported from England, and it is understood that most of it is blended and flue-cured cigarette stock shipped to a subsidiary company in the Netherlands for manufacture into cigarettes. Total leaf requirements of cigarette manufacturers, therefore, are reduced approximately to the extent by which this imported cut tobacco is increased; that is, from 1.5 to 1.7 million pounds annually.

Less smoking-tobacco leaf - Smoking-tobacco consumption in the Netherlands, although subject to wide fluctuations, shows a definitely downward long-time trend. Since 1923, consumption has declined 20 percent, about 1.3 percent or 300,000 pounds a year. For American types this decline is slight and is more than offset by the variation in exports and by changes in blends.

Shifts in taste to flue-cured and Burley - The fairly rapid shift since 1930 from oriental-type cigarettes to blended-type cigarettes has already been mentioned (see table 2). Figure 4 shows the approximate number of each type of cigarette consumed annually since 1930 and the estimated quantities of the several types of leaf required (including that imported as cut tobacco). The resulting increase in flue-cured leaf is not nearly so great as the increase in consumption of blended cigarettes because blended cigarettes contain both oriental and flue-cured leaf, as well as small quantities of other types, such as Burley, Maryland, and Java. Furthermore, there has been some decline in the proportion of English-type cigarettes made entirely from flue-cured leaf. It is estimated that the shift to blended cigarettes since 1930 has resulted in the use of about 1.9 million pounds more flue-cured leaf, an increase of 44 percent above the quantity that would have been required had there been no change in the type of cigarettes consumed. This is equivalent to an increase of 250,000 pounds of flue-cured leaf annually.

The use of Burley and Maryland leaf in blended cigarettes, although small, has increased at a more rapid rate. Practically none was used in 1930, whereas now a total of about 1.5 million pounds of these two types is estimated to be used in cigarettes. Further shifts in this direction will probably be slower, and it is unlikely that the demand for oriental cigarettes will entirely disappear. Any further shift from English-type to blended cigarettes would be to the net disadvantage of United States leaf.

In smoking tobacco there has also been some tendency to shift toward lighter shag and mixtures made largely from flue-cured leaf. This shift is less rapid than in cigarettes and is held back by the relatively high price of light shag compared with the low-priced *Baai* made largely from low grades of Java leaf.

Cheap competitive leaf - The relationship of prices of competitive leaf is far more important than the actual level of prices. Furthermore, competition is not limited to leaf of the same type. Manufacturers tend to increase the proportion of low-priced oriental leaf as filler in blended cigarettes and may also reduce the prices of their oriental-type cigarettes when certain grades of oriental leaf become relatively cheaper than flue-cured. In this connection, it should be pointed out that there are a large number of cigarette brands in the Netherlands, and new ones are continually being introduced.

There is a slowly increasing demand for fine-cut light shag smoking tobacco made from flue-cured leaf; but when this leaf becomes relatively more expensive compared with the Java leaf used in *Baai*, the difference in retail price is accentuated and consequently consumers use less light shag.

The principal competitive supplies of flue-cured leaf have been small quantities from British India, Southern Rhodesia, and China. The proportion of flue-cured leaf in the imports from British India is not known, but total imports from this source have varied between 1 and 2 million pounds during recent years, whereas imports of flue-cured leaf from China and Rhodesia amounted to only about 200,000 pounds. The price of Chinese leaf, as indicated by average import values of from 10 to 13 United States cents per pound, is only slightly lower than that of United States leaf. Rhodesian leaf has averaged 9 and 10 cents, and Indian is the cheapest of all.

Other leaf types competing indirectly with flue-cured are principally the low-priced grades of oriental leaf used as cheap filler and available at from 6 to 10 cents per pound. Some of the lightest grades of Besoeki and Algerian leaf are also used in greater proportions in blends to replace flue-cured.

United States fire-cured leaf has practically no direct competition. A small quantity of Italian fire-cured was imported in 1938, but manufacturers are reported to have been dissatisfied with its quality. There is, however, a wide variety of other types of dark leaf competing indirectly with United States fire-cured leaf in the manufacture of dark smoking tobacco. Such competitive types include, notably, cheap Hungarian with an import value equivalent to from 4 to 5 cents per pound, dark British Indian at about the same price, Paraguay from 5 to 7 cents, and numerous other types. The average import value of fire-cured leaf from the United States in 1937 and 1938 was 11.2 and 11.7 cents per pound, respectively.

Burley and Maryland leaf, which play a relatively minor part in both cigarette and smoking tobacco, are not available from other sources; but other kinds of medium to light air-cured leaf, especially Loemadjang and Besoeki from Java, are substituted for them.

The prices of practically all kinds of leaf in the Netherlands have declined sharply from the 1927-1930 level (tables 9 and 12). The greatest price drop was in oriental leaf, the average import value of which declined from 2.45 florins per kilogram during 1921-1924 to 1.68 florins during 1927-1930 and to 0.57 florins during the 4 years 1935-1938. In terms of Netherland currency, the recent prices are therefore only about one-third those of 1927-1930 and less than one-fifth those of 1921-1924.

In terms of United States currency, after allowing for the difference in exchange rates, oriental-leaf prices in the Netherlands declined 50 percent from the equivalent of 30.4 cents per pound in 1927-1930 to 15.1 cents in 1935-1938. During the same time, the average import value of flue-cured leaf declined only 19 percent, from 15.6 cents per pound to 12.6 cents. In one year, 1935, there was only a 10-percent difference between the average import value of flue-cured at 13 cents and oriental at 14.3 cents per pound. Oriental leaf does not need to be stemmed at all, and therefore the average net cost of oriental leaf was actually lower than that of flue-cured, and the lower grades used in blended cigarettes were considerably cheaper.

Table 12. Prices of leaf tobacco in the Netherlands, as indicated by import values, averages 1927-1930 and 1935-1938

KIND	NETHERLAND CURRENCY, PER KILOGRAM			UNITED STATES EQUIVALENT, PER POUND		
	AVERAGE 1927-1930	AVERAGE 1935-1938	CHANGE	AVERAGE 1927-1930	AVERAGE 1935-1938	CHANGE
	Cents	*Cents*	*Percent*	*Cents*	*Cents*	*Percent*
United States -						
Flue-cured	86	46	-47	15.6	12.6	-19
Fire-cured	125	57	-54	22.7	15.5	-32
Maryland	70	31	-56	12.7	8.6	-32
Other kinds -						
Oriental	168	57	-66	30.4	15.1	-50
Sumatra	412	381	-8	74.8	104.6	+40
Java	83	45	-46	15.0	12.4	-17
Brazilian	113	44	-61	20.5	12.0	-41
Paraguay	57	24	-58	10.3	6.7	-35
Hungarian	44	17	-61	7.9	4.6	-42
British Indian	30	16	-47	5.4	4.4	-19

Table 9 also shows the price trend for the other principal types of leaf used in smoking tobacco. It will be noted that the price of fire-cured has been consistently higher than the price of other kinds of leaf, although the average import value in United States currency declined by 32 percent to 15.5 cents during 1935-1938. Throughout this period, not only were all the other smoking tobacco types cheaper, but their prices dropped more rapidly, with the exception of Java and British Indian leaf. The extremely low price prevailing for some smoking-tobacco leaf is shown by the fact that well over a million pounds each of Paraguay and British Indian leaf are used annually at average import values, delivered in the Netherlands, equivalent to 6.7 and 4.4 United States cents per pound, respectively, in addition to about one-half million pounds of Hungarian leaf at 4.6 cents per pound.

Decline in prices and quality - The sharp declines in retail prices of tobacco products in the Netherlands have forced manufacturers to purchase lower grades of leaf and to substitute lower priced kinds of leaf wherever possible. The decline in prices of products since 1927-1930 is shown in table 13. The average price of cigars, including cigarillos, in 1938 was equivalent to about 2.3 cents each in United States currency. The cigarette price average in 1938 was equivalent to 11.4 cents per package of 20, and nearly one half the total sales were in the price class equivalent to 8.25 cents per package.

Smoking-tobacco prices averaged 43.7 United States cents per pound, retail, in 1938. Some is sold for as low as 10 cents per pound, and about one third of the total consumption is sold at the equivalent of 30 cents per pound or less. The average value of exported smoking tobacco in 1938 was equivalent to only 11 cents per pound (free from excise tax). It is obvious that these prices, after the deduction of manufacturing and selling costs and taxes, do not permit manufacturers to purchase much high priced leaf.

Table 13. Retail prices of tobacco products in the Netherlands, 1938 with comparisons

YEAR	NETHERLAND CURRENCY		
	CIGARETTES, PER 20	CIGARS, EACH	SMOKING TOBACCO, PER KILOGRAM
	Cents	*Cents*	*Florins*
Average			
1923-1926	35.0	7.30	2.36
1927-1930	34.0	6.89	2.36
Annual			
1931	34.6	6.55	2.30
1932	30.2	5.90	2.10
1933	22.8	5.25	1.94
1934	22.6	4.94	1.96
1935	22.1	4.51	1.87
1936	21.3	4.22	1.78
1937	21.0	4.23	1.75
1938	20.7	4.18	1.75

Since 1930, prices of all products in the Netherlands have fallen sharply (table 9). Prices of cigarettes and cigars dropped about 40 percent, smoking tobacco consumed in the Netherlands 26 percent, and exported smoking tobacco 56 percent. So rapid has been the price decline that, in spite of increased consumption, the total value of tobacco products consumed declined every year from 1930 to 1936. Since 1930, cigarette consumption has increased 33 percent, yet the value in 1938 was 20 percent lower than that in 1930. For cigars, a 13 percent increase in consumption has been accompanied by a 31-percent decline in total value, and in smoking tobacco both quantity and value have declined.

It is difficult to determine the exact reasons for this price decline, so much sharper than that experienced in most European countries. One important cause has been the declining consumer purchasing power, with efforts on the part of manufacturers to maintain the volume of consumption by reducing prices. Their efforts appear to have been at least partly successful, since the volume of consumption actually continued to increase during most of the depression years. When the price of smoking tobacco was raised slightly in 1934, the volume of consumption dropped sharply; and, when prices were again reduced in 1935 and 1936, consumption increased The system of taxation also encourages price reductions. This factor is discussed later in the section, "Tax encouragement of the use of low-priced leaf."

Another important factor has been the intensive competition among manufacturers and the absence of any real price agreement. Efforts in this direction will be discussed in a later section of this article. A further factor has been the general decline in leaf costs, which made possible lower costs of production, particularly from 1930 to about 1936 (table 12 shows the extent of this price reduction).

The most important result of cutting prices of tobacco products was that it led to the use of lower-quality leaf. Once prices had been reduced and the public accustomed to lower prices, it was extremely difficult to increase prices again even when leaf costs rose in 1937 and 1938. Consequently, manufacturers turned to lower grades of leaf, which would permit them to maintain their leaf costs within certain limits. As may be seen from table 12, the average value of Netherland imports of flue-cured leaf from the United States (in terms of United States currency) declined 19 percent from the period 1927-1930 to 1935-1938, yet the average farm prices of flue-cured leaf in the United States actually increased 14 percent during the same period. From this it would appear that Netherland manufacturers reduced the quality and grades of their flue-cured leaf about one-third. Flue-cured leaf shipped to the Netherlands is among the lowest-priced in Europe, averaging 12 or 13 cents per pound, export weight.

Similarly, in the case of fire-cured and Maryland leaf, the average value of Netherland imports declined 32 percent during the above period, whereas farm prices in the United States declined only 17 percent for fire-cured leaf and 14 percent for Maryland. Burley leaf shipped to the Netherlands averages from 14 to 18 cents, and Maryland only from 8 to 9 cents compared with the higher-priced grades of from 30 to 45 cents shipped to France and Switzerland. Fire-cured leaf to the Netherlands averages from 12 to 18 cents, which is well above the grades shipped to France, Spain, and Belgium.

World prices of oriental types of leaf - Greek, Turkish, and Bulgarian - in terms of United States currency, as indicated by the average export values from these countries, dropped sharply from 1930 to 1933, but have risen since to a 1937-1938 level above that of 1927-1930. Yet the average dollar value of Netherland imports of each of these types has fallen sharply and during 1935-1938 was only about 50 percent of that in 1927-1930, indicating a significant reduction in the quality of oriental leaf used by Netherland manufacturers.

This increasing emphasis on lower-priced products and lower grades of leaf is unfortunate for all leaf producers, but works to the particular disadvantage of the

United States where quality of leaf is the prime consideration. For some time, manufacturers have made efforts to stop the decline in the price of products; but, until this is accomplished, low prices rather than quality will continue to be manufacturers' first consideration in filling their leaf requirements.

Effect of Government Policies and Taxation

Taxation of tobacco is primarily to obtain revenue and is held relatively low in order to permit low prices to consumers. The different levels of taxation applicable to the various tobacco products, however, affect their consumption and in turn the demand for the various types of leaf. Direct taxes on tobacco are of two principal types, the excise or banderole tax and the import duty. The import duty on unmanufactured tobacco is extremely low, 1.40 florins per 100 kilograms, equivalent to only one-third United States cent per pound. This duty is so low that dealers reexport annually about 2 million pounds of leaf after the duty has been paid without obtaining a refund.

Tax encouragement of the use of low-priced leaf - The principal tax is the excise or banderole tax, calculated as a fixed percentage of the retail price of the products. This method of calculation on a straight value basis, in contrast with taxes on a specific (or quantitative) basis, encourages lower retail prices for tobacco products, since with each increase in retail price the amount of the tax is increased proportionately and with each reduction the amount of the tax is reduced. Since the Government shares the loss from price reductions, manufacturers have been more willing to reduce prices and use lower-priced leaf. As the tax is on a percentage basis, the revenue from tobacco declined sharply in 1933 when retail prices declined. As a result, the Government had to increase the tax rates in 1934 in order to maintain revenue.

Excise taxes on tobacco products in the Netherlands were first established by law of May 6, 1921, and came into force on June 1, 1922. Therefore, the first full year of taxation was 1923, when the tax on cigarettes amounted to 15 percent of the retail price and on cigars 10 percent. On January 1, 1925, the tax on cigarettes was raised to 25 percent, where it remained until June 1, 1931, when it was slightly increased. On April 1, 1932, it was again increased, to 33.3 percent of the retail price, and on March 1, 1934, to 50 percent, at which level it has remained.

Cigar taxes remained 10 percent of the retail price from 1923 until March 1, 1934, when they were increased to 12.5 percent on those cigars defined as "cigars with closed ends having an average weight of not less than 3.5 kilograms per thousand," and to 17.5 percent of the retail price of other cigars (principally cigarillos). There has been no change in cigar taxation since 1934. For smoking tobacco and other products, the tax was increased on March 1, 1934, to 22.5 percent of the retail price and has remained at this rate to the present time.

Tobacco taxes in the Netherlands are among the lowest in Europe and materially lower than in the United States or the United Kingdom. It is estimated that consumers in 1938 spent for tobacco products the equivalent of about $8.50 per capita. Of this amount, excise taxes made up about $2.34 and import duties on leaf and manufactured products an additional 10 cents. In the United States, it is estimated that the per-capita tobacco taxes in the form of import duties and excise taxes amounted to about $4.25, and in the United Kingdom to about $8.10.

After each increase in the tax rates since 1923, there was a distinct tendency for consumption to decline during the succeeding year or two, as may be seen from figure 3. The adverse effect of increased taxation on consumption seems to be short-lived, however, and consumption almost always tends to return to the long-time trend. It may be concluded that the relatively small amount of the tax has not approached the point at which it would have a permanently retarding effect on consumption.

Government policy to increase employment - Another aspect of Government policy affecting the tobacco industry is the favoritism to the cigar industry through relatively lower taxes than on other products. Full-sized cigars are taxed at 12.5 percent compared with 50 percent on cigarettes. Furthermore, in 1934, when cigar taxes were slightly increased, provision was made for a lower tax rate of cigars with closed ends, which require a large amount of hand labor, whereas cigarillos and *stumpfen* with open ends, made largely by machines, were taxed at a higher rate. In order to insure the maintenance of employment in the cigar industry, legislation regulates the amount of machinery that may be used in the manufacture of cigars and prevents the installation of additional new cigar machinery that might reduce employment.

Effect of devaluation - From 1920 to 1933, the Netherland florin was worth approximately 40 United States cents; but, following the devaluation in the United States, it increased in value to about 68 cents in 1934. On September 26, 1936, the Netherland currency was devalued from the equivalent of 68 cents per florin to 55 cents, a decline of nearly 20 percent in terms of United States currency. The immediate effect of the 1936 devaluation was to increase leaf-tobacco prices in terms of Netherland currency and to increase the cost of living generally; and, since wages did not advance so rapidly as the cost of living, consumption declined temporarily. Furthermore, there was a tendency to retard the increasing imports of manufactured cigarettes and to facilitate the exports of smoking tobacco, cigarettes, and cigars. Prices of both leaf tobacco and tobacco products, however, were very low in the Netherlands at the time of the devaluation, and the adjustment of the new exchange rates appears to have taken place without any great effect upon the leaf market.

Colonial leaf favored - Although leaf imported from the Netherlands Indies is subject to the same rate of import duty as that from foreign countries, the amount of the duty itself is insignificant. The use of colonial leaf is favored by lower tax rates on cigars and smoking tobacco, in which colonial leaf is used, as compared with the high tax rate on cigarettes, which are made almost entirely of foreign leaf. Another scheme that has been proposed repeatedly by the East Indian tobacco interests is the establishment of fixed minimum percentages of leaf from the Netherlands Indies to be used in tobacco products. This would seek especially to get a foothold for Java leaf in the expanding cigarette market. Fortunately, these proposals have not been carried out; and it is felt that they not only would be contrary to the general principles of noninterference on the part of the Government, but would also open the way to counteracting legislation in other countries that constitute important markets for Netherlands Indies leaf.

Cigarette cartel efforts to raise prices - A cigarette cartel was formed in 1935 in an effort on the part of Netherland cigarette manufacturers to solve their own problem and to stop the drastic drop in cigarette prices that was jeopardizing their profits. By 1935, cigarette prices had dropped 35 percent from the level of 1927-1930, and the proportion of the consumption falling in the bottom price bracket of three-fourths Netherland cent per cigarette had increased from less than 3 percent of the total to over 40 percent in 1935. Furthermore, the increased excise tax on March 1, 1934, had further reduced the proportion of the retail price going to manufacturers. At the same time, imports of cigarettes from abroad were increasing. In an effort to increase the volume of sales, some manufacturers were spending more for advertising and fancy packaging and were allowing special discounts to distributors. Three of the larger manufacturers, who together represented about 75 percent of total cigarette production, were financed largely by foreign capital, and smaller manufacturers were complaining that the industry was going into foreign hands.

Because of this critical situation, smaller manufacturers appealed to the Government for assistance in the form of lower taxation, limitation of the number of three-fourths-cent cigarettes that could be sold, and control of unfair trade practices. The Government was unwilling to reduce taxation and put the problem up to the industry as a whole to reach an agreement among themselves. It is reported that the Government let it be known that, failing such solution, consideration would be given to creating a Government monopoly.

Most of the manufacturers finally agreed to the provisions of a cartel (Verbond van Sigarettenfabrikanten), which became effective on August 1, 1935, for a period of 3 years to July 31, 1938, with the option of termination at the end of 1 year. Manufacturers participating in the cartel represented roughly 90 percent of the cigarette output. The cartel had two important groups of provisions. The first dealt with "fair-trade practices" and the second established a system of production quotas with penalties and benefit payments for exceeding or falling short of the quota. The most important among the fair-trade practices involved a reduction in advertising on three-fourths-cent brands, the abolition of the use of cellophane in packaging three-fourths-cent cigarettes, the prohibition of special discounts and gifts to distributors, the prohibition of participation by manufacturers in channels of distribution, and the limitation of the number of new brands that could be put on the market. It also limited the outlay for window displays and the use of automatic vending machines. These practices were generally adhered to by manufacturers who were members of the cartel and resulted in considerable economy to them.

The other, more difficult phase of the cartel's operation was the establishment of quotas for individual manufacturers. For this purpose a company was formed, owned and controlled by the cartel, which had power to enter into legal and binding agreements with individual manufacturers. Manufacturers who exceeded their quotas paid penalties into a pool from which payments were made to those manufacturers whose production fell short of the quota. Generally this resulted in a net payment from the larger manufacturers to the smaller ones. When the cartel was formed, it was understood that the Government would assist by limiting the number of banderoles it would make available for three-fourths-cent cigarettes. It was reported that, although legislation was prepared to this end, it was never enacted, probably because of the fear of popular disapproval that might follow Government measures tending to increase the cost of cigarettes and therefore the cost of living.

One of the principal objectives, if not the most important one, was to increase the price of cigarettes and reduce the proportion of three-fourths-cent cigarettes. These objectives the cartel failed to accomplish, since the average price of cigarettes continued to decline, although more slowly, from 1.129 Netherland cents each in 1934 to 1.103 in 1935 and to 1.035 in 1938. At the same time, the proportion of consumption falling in the three-fourths-cent class continued to increase steadily from 36.7 percent in 1934 to 47.2 percent in 1938. Furthermore, the production of certain companies not participating in the cartel increased during the period, and there was considerable dissatisfaction with quotas and payments within the cartel.

When the question of renewal of the cartel was raised in 1938, it was impossible to reach an agreement for its continuation. In its absence, however, and until a more satisfactory solution could be found, manufacturers accepted a "gentleman's agreement" in July 1938, which provided for the continuation of the fair-trade-practice provisions of the old cartel, but without the quota and penalty-premium-payment provisions. At the same time, manufacturers petitioned the Government for a mandatory code of fair practices to be imposed upon the entire cigarette industry in accordance with a law of May 1935, under which codes had already been made operative for certain other industries. Considerable time is required before such a code can become effective. The law requires that the provisions be made public and opportunity be afforded for complaints of members of the trade, of allied trades, and of the Government.

The proposed code would provide for the continuation of most of the fair-trade-practice provisions of the original cartel and for the strengthening of the provisions relating to the number of new brands, packaging, sizes, maximum wholesale and retail discounts, advertising, displays, etc. The proposed code would contain no provision for quotas and penalties. It seems, therefore, that, even if this code becomes effective in 1939, it in itself will not provide adequate means for the much-needed increase in the price of cigarettes.

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RECENT JAPANESE AGRICULTURAL POLICIES *

On previous occasions, Japan's agricultural policies were touched upon in considerable detail. [1] *The problems created by overpopulated villages, huge indebtedness, high interest rates, inequitable taxation system, poor credit facilities, and widespread tenancy have offered ample scope for agricultural reform. The Japanese Government has promulgated a number of measures toward that end, such as stabilization of prices, control of output (in the case of cocoons), easing of debt burden, and fostering of farm ownership. An examination of these measures, however, reveals that, on the whole, they have not been sufficient to solve the task at hand. Fundamental improvement in basic conditions affecting Japanese agriculture has not been attained.*

On the eve of the Sino-Japanese hostilities, there was still great need for agricultural reform in Japan. This conflict proved to be no boon to Japanese agriculture but, on the contrary, increased its burdens. Demand for farm products has been stimulated, but the greater number of farmers, having no surplus to bring to market, have not been able to reap the benefits of high prices. Moreover, the improvement in prices of agricultural products has not kept pace with the rise in prices of articles purchased by farmers. The war also deprived many farms of their principal workers and of much of their livestock and diminished their supply of artificial fertilizer.

Thus, after the outbreak of the Sino-Japanese war, the Government of Japan had on its hands not only the old, unsolved problems but also the new, emergency problems calling for a solution. To ease some of these burdens, and by this token to insure peace and order in rural communities, so important to Japan in wartime, the Government promulgated a number of measures.

GOVERNMENT FARM AID

Maintenance of Output

At the very beginning of the conflict, the Japanese Government became concerned with the maintenance of agricultural output at normal levels. This was to be achieved in the face of the diminishing productive power in the villages. In peacetime Japan has, of course, a surplus of labor, both seasonally and absolutely, but

* Prepared by O. L. Dawson, Agricultural Commissioner, and W. Ladejinsky, Associate Agricultural Economist, Foreign Agricultural Service.

[1] *Foreign Agriculture*, September 1937, January 1938, and February 1939.

not so in time of war. Many farmers join the army, and some find their way into the expanding munition industry. Large numbers of horses are requisitioned by the army, and the supply of fertilizers, which play so important a role in Japan's agriculture, may fall short of demand because in wartime the industry must divert some of its activities to purely military purposes Furthermore, lack of mechanization makes shortage of labor more keenly felt.

To meet this situation, the Ministry of Agriculture and Forestry, as early as August 6, 1937, issued an order concerning the readjustment of labor and equipment in rural districts According to this measure, "labor in villages is required to be unified and coordinated so that a shortage of labor in one village may be supplied by labor from a neighboring village. Communal labor is encouraged everywhere, while modern tools and machines for agricultural, horticultural, and livestock operations are supplied to increase the labor power per head " 2/ Mutual assistance is brought about by the organization of special "service bands" in each village under the supervision of the Prefectural and Village Committees for Rehabilitation.

Financial Assistance to Farmers

Assistance to farmers called to war is not limited to the above measure; local political and economic associations are making an effort to help such farmers in a number of ways, such as "furnishing them with necessary funds for carrying out agricultural operations and side industries through credit associations; supplying them with fertilizers, forage, and fuel; helping them in settling matters in connection with tenant rights or in keeping up their status as landed farmers; distributing rice from Government stocks at reasonable prices; * * * giving them the first chance to obtain jobs in public works; securing reduction or cancellation of dues that they may owe various associations; giving them aid in settling debts; and allowing them to enter cooperative associations with special privileges." 3/

Farm indebtedness, estimated at about 6 billion yen, has been in the forefront of Japanese agricultural problems for a long time Worse still, interest rates are usurious According to official estimates, the rates of interest being paid on agricultural indebtedness, in the amount of more than 4 billion yen, were as follows· 43 percent of the total at a rate ranging from 7 to 10 percent; 51 percent at a rate from 10 to 15 percent; and 6 percent at a rate higher than 15 percent There is evidence, moreover, that real rates are considerably above these official estimates.

Indebtedness and high interest rates constitute a heavy burden in peacetime; and in wartime, when so many farm families are deprived of their principal workers, they are perhaps much more onerous To ease the burden, since the outbreak of hostilities, the Government has enacted two measures dealing with indebtedness· the Farm Debts Redemption Fund Law and the Temporary Farm Debts Liquidation Law

As regards the first, the Government permitted a number of financial institutions, such as the Japan Hypothec Bank, the Agricultural and Industrial Bank, the

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2/ The Japan Yearbook, 1938-39, p. 462.

3/ *Ibid* , pp. 462-463.

Hokkaido Colonial Bank, and the Central Cooperative Bank, to extend credit to bodies associated with the task of redeeming farm liabilities. The period during which this special financing may be effected must not exceed 10 years, and the terms of loans must not exceed 25 years from the date of promulgation of the law. All loans must be secured, since "the amount of special financing of those banks shall be within the estimated value of real property given in mortgage." 4/ The liability of the Government for any losses incurred in the process of this financing is limited to 120 million yen. 5/

A similar attempt to deal with rural indebtedness was made in 1933. At that time the Government confined itself to settling a relatively small portion of the farm debt. The financial assistance it has rendered in the form of loans amounts to only 200 million yen. In the end, the Government's principal contribution was to advise that debts be scaled down by "making a more active use of the tradition of neighborly fellowship and mutual aid." 6/ But the assumption that creditors would become so imbued with goodwill toward their debtors and that debt settlements would take place without ado had no basis in fact. On March 30, 1936, debts actually so adjusted amounted to 157 million yen, or only 3 percent of the total estimated farm debt. Now farmers are again asked to ease the debt burden through the employment of their own meager resources. This method has not been successful in the past, and it holds little promise for the present or the future.

The second measure, known as the Temporary Farm Debts Liquidation Law, does not extend to the farming population as a whole, but only to "bereaved families and families of wounded soldiers living in the countryside." 7/ The latter "may express their wish to settle their debt to the Temporary Prefectural Committee for the Liquidation of Debts, which thereupon mediates between the debtor and creditor to liquidate or consolidate the debt through reduction of the principal, rate of interest, or period of redemption." 8/ The success of this method of scaling down indebtedness depends upon the goodwill of the parties concerned, and particularly upon the willingness of the creditor to make downward revisions of both principal and interest rates. This method failed in the past, and it remains to be seem whether war conditions will prompt creditors to greater sacrifices.

Crop Insurance

In order to overcome some of the severe effects of damages and losses periodically caused by typhoons, floods, drought, and hail, an agricultural insurance law has been enacted. It provides for insurance for rice, wheat, and mulberry crops. The insured are not private households but agricultural insurance societies organized according to this law. Risks are reinsured by associations of such societies,

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4/ Farm Debts Redemption Fund Law, article 3., *Monthly Circular*, Mitsubishi Economic Research Bureau, September 1937, p. 23.

5/ *Ibid.*, articles 5, 6, and 8.

6/ Yagi, Yoshinosuke, "The Problem of Farm Debt Adjustment," *Kyoto University Economic Review*, July 1937, p. 65.

7/ *Monthly Circular*, Mitsubishi Economic Research Bureau, May 1938, p. 18.

8/ *Ibid.*

and the Government guarantees the payment of insurance money. The maximum insurable amount is to be fixed by special orders, but it is estimated to be 20 yen to independent farmers, 10 yen to landowners and tenants for rice, 10 yen for wheat, and 20 yen for mulberries. 9/ The insurance is so small that it would seem to offer but slight relief from the effects of severe crop failures.

Reducing Cost and Increasing Supply of Fertilizers

Before the outbreak of Sino-Japanese hostilities, the Government made some efforts to reduce the price of fertilizers. Because of the monopolistic character of the industry, fertilizer prices were rigidly maintained even during the years of severest depression, although prices of agricultural products were at rather low levels. Under the pressure from farmers, a law was enacted in 1936 "to bring about the improvement and development of the fertilizer-manufacturing industry as well as of the farming industry, having in view the facilitation of the supply of and demand for fertilizers and the establishment of a fair price." 10/ The fertilizer manufacturers were forbidden to fix prices without the approval of the Government, but in effect price regulations have been widely evaded. The "China incident" added to this problem the problem of securing sufficient supplies, since in wartime the demand for chemicals that go into the making of artificial fertilizer is greatly stimulated.

In consequence of this development, on April 2, 1938, the Japanese Government promulgated the Sulphate of Ammonia Output, Expansion, and Distribution Control Law. It aimed to stimulate output and eliminate imports through the enlargement and improvement of manufacturing equipment, as well as through certain exemptions of taxation on incomes and profit. Machinery imported for manufacturing was also exempted from import duties. These efforts to produce domestically all the artificial fertilizer required have not yet been fully achieved, although the company announced that in 1938-39 Japan would be self-sufficient in ammonium sulphate. Rapid increase in output is prevented by higher cost of production, the shift of some manufacturers to more profitable lines of business, shortage of building materials and hydroelectric power, inability to import the necessary plant equipment on account of exchange control, and, especially, restricted imports of raw materials. 11/

The same law provided for revamping the system of distribution of fertilizers. In this connection, the Sulphate of Ammonia Sales Company was set up for the purpose of buying the entire product from the mills at the official wholesale price and selling to farmers through retailers at the official retail price. The company has the right to import and export the product and in general engage in all transactions, including manufacturing, to meet the demand for artificial fertilizer at fair prices.

The Feedstuffs Distribution Control Law empowered the Government to order certain groups to engage in transactions for adjusting the demand and supply of animal

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9/ At current rate of exchange, the yen is worth about 27 cents.

10/ *The World Agricultural Situation in 1935-36*, International Institute of Agriculture, Rome, 1937, p. 261.

11/ Farley, Miriam S., "Japan's Fertilizer Problem Still Unsolved," *Far Eastern Survey*, March 15, 1939.

feed at fair prices. The purpose of this act was to conserve the supply of feedstuffs in view of the emergency. Imports were to be monopolized by special distribution companies.

Creating Independent Farmers

Perhaps the outstanding measure promulgated by the Government is the Farm Adjustment Act of April 2, 1938 Its aim is threefold: disposition and management of farms owned or rented by farmers who have been conscripted into the army; creation of new farm proprietors; and adjustment of landlord-tenant relations. The first of the three measures is intended to preserve or strengthen the economic position of the farmer-soldiers, while the other two constitute an attempt to make certain adjustments and improvements in the existing land-tenure system of Japan.

The act enables local authorities and agricultural societies to negotiate with landlords for the purchase of land upon which independent farmers can be settled. When negotiations are not successful, they may ask for arbitration. In addition, "in case the above-mentioned organizations attempt to exploit undeveloped land, such land may be acquired for them by applying the Law of Expropriation of Land, after negotiations with the owners have failed." 12/ The Government may, when it deems necessary, force the landowner to inform rural authorities of the proposed sale of his land, and the newly created farm owners are not permitted, unless approval is obtained from the Government, to transfer or part with their holdings.

Limiting Power of Eviction

The act significantly provides for strengthening the position of the tenant with respect to leases. It may be recalled, in this connection, that in the last 20 years disputes between landlords and tenants have increased from 85 to nearly 6,000 annually. While the causes are manifold, two in particular must be noted: in the twenties disputes were due to excessive rents; more recently they have been caused by attempts of landlords to terminate leases and evict tenants from the land. In order to reduce this practice to a minimum, and thereby bring about more peaceful relations between landlords and tenants, the act made the following provisions: 13/

(1) Contract for lease of farm land entered into between two parties shall be valid against a third party even if such a contract is not registered. Hence, the contract of the lease shall not be affected by transfer of the ownership of the land due to sale or other reasons, or by mortgage rights or real rights that may be set up.

(2) The landowner may not cancel a contract of lease of that land without consent of the lessee or refuse to renew the contract at its expiration, except in cases when the lessee without good reason defaults in payment of the rent or commits perfidious acts, or

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12/ *Tokyo Gazette*, March-April 1938, p. 8.
13/ *Ibid.*, p. 8.

when the landowner becomes obliged to cultivate the land himself or to use the land for building dwelling houses or for other justifiable purposes, or when the landowner, for good reasons, becomes unable to continue to keep the land under tenancy.

(3) When a contracting party intends to cancel the lease of the farm land or to refuse the renewal of it, he shall be required to notify the other contracting party of such intention 6 months or 1 year in advance. At the same time, he shall notify the Commission on Farm Land of the respective city, town, or village so that the matter may be arranged as smoothly as possible.

According to the second provision, the conditions under which the landlord may evict a tenant are rather vague; also, the landlords still continue to have an important voice in rural matters. The effectiveness or lack of effectiveness of this measure, therefore, cannot be determined at this juncture.

Settling Disputes

The Japanese Government realizes that, while disputes may decline in number, they will not be eliminated altogether so long as tenancy exists. Hence, new provisions are made for settling controversies as they arise. Disputes are submitted for arbitration in accordance with the Tenancy Arbitration Law. Furthermore, courts are also authorized to submit for arbitration any judicial case concerning tenants. The courts may decide upon certain preparatory measures necessary for arbitration, such as keeping crops on disputed land unchanged, holding the land rentals in custody, or issuing orders concerning the cultivation of the land during the period of negotiations. In case arbitration fails, the courts have the right to step in and settle disputes at their discretion.

Enlisting Support of Farmers

In order to promote a better understanding of the needs of the nation due to the war emergency and to obtain closer cooperation in the movement for general mobilization, a League for Agricultural Service to the State has been established. It is composed of different agricultural-, forestry-, and marine-products associations, comprising in all 31 associations. Leaders have to be appointed in all cities, towns, and villages. The chief aim of this league is to study measures to increase productivity of farming and fishing villages, which have had considerable difficulty in keeping up the level of production owing to the shortage of materials and qualified labor.

PROGRAM OF EXPANSION

Aside from the measures mentioned above, the Japanese Ministry of Agriculture and Forestry has been formulating a far-reaching farm program for an increased production of rice, wheat, barley, oats, and raw materials for alcohol, such as potatoes and sweet potatoes. The wheat production aimed at is 50 million bushels, according to a new 5-year program, as against an average annual output of 46 million bushels (1933-1937). Production schedules for the other crops were not stated A plan for improving the supply of raw material for wood pulp is also included. This involves increase in the cutting of trees and afforestation. Other products included in the program are silk, tea, and horticultural products. In order to carry out this program of increased production, provision for adequate supplies of fertilizer, farming implements, and fishing equipment is included in the plan. The program also provides for the reclamation of waste land and the improvement of arable land. Necessary appropriations for carrying out the general plan, variously estimated at around 27 million yen, are to be included in the budget for the 1939-40 fiscal year

The danger of friction from competition between Japan and Manchuria, China, and Taiwan, and especially the possible adverse effects on Japanese agriculture, caused Japan to work out a plan for coordination of the agricultural output of the four countries. The matter was considered at the East Asia Agricultural and Forestry Congress, which convened at Tokyo on August 15, 1938, and was composed of representatives of Japan and its direct and indirect dependencies The broad outlines of the program adopted by the Congress were as follows· For Japan, Manchuria, China, and Taiwan to expand agricultural production so as to meet the needs of the population and the army; to improve the trade balance through the reduction of imports and the supply of raw material for export; and to adjust agricultural relations among the countries through mutual collaboration and coordination.

Raising Output in North and Central China

The vagueness of this program disappears and Japanese real intentions become fully revealed once the parts to be played by the three other countries are noted No rice is grown in North China; and, to avoid conflict with Japanese interests, rice production is not to be increased in Central China Chinese tea is to be exported to other countries in a manner that will not interfere with the disposal of Japanese tea. Central and North China silk industries are to avoid friction with the Japanese silk industry. As to the all-important question of cotton production in North China, it has since been outlined in a 9-year plan calling for 2.7 million bales by 1946, or an increase of approximately 60 percent over the average 1934-1937 output Half of the cotton output is to be consumed by the local textile mills, largely Japanese owned, and most of the remainder is to be exported to Japan proper Very little could be done this year by the new Japanese-fostered Government to promote this program, owing to the lack of political control in interior sections, and future progress depends much upon the extension of such control. It is expected that the increase will be chiefly on the basis of yield, rather than acreage, as originally included in various earlier plans. The change in emphasis was caused by Japanese studies showing that, if North China's food requirements were to be fully satisfied, the acreage under food crops had to be maintained at existing levels.

Importance of Manchuria

For the time being, however, it is Manchuria that occupies a preeminent position in Japanese agricultural plans The country is expected, first, to provide a greater degree of self-sufficiency in products now imported, such as wheat, cotton, and tobacco; second, to provide certain quantities of agricultural products for

Japan proper; and, third, to increase the supply of exportable products in order to pay for manufactured products to be imported from Japan. More concretely, the formulated plans call for the production of soybeans amounting to 184 million bushels in 1941 as against an average of 151 million bushels during the years 1933-1937; self-sufficiency in wheat is to be attained in 1941 with a yield of 60 million bushels, or almost double the average annual output of 33 million bushels (1933-1937). In order to make Japan and Manchuria self-sufficient in fodder, the plan provides for raising the annual output of kaoliang to 5.3 million short tons and that of maize to 102 million bushels. With respect to cotton, by 1942 the annual output is to amount to 400,000 bales. Manchuria is also to supply Japan with a greater amount of lumber and pulp, and concentrate greater efforts on the production of livestock. Production of hemp and flax is to be encouraged wherever possible, in the hope of reducing the large imports of jute and gunny bags. In short, Manchuria is to develop a diversified agricultural economy that will be able to supply at least part of the special crops Japan needs.

In order to execute this program, the former official policy of indirect guidance and encouragement is to give way to more direct efforts "to reclaim waste lands, open up virgin lands, utilize marshy lands and land containing excessive soda; to restore and maintain fertility of soil; to effect river improvements and irrigation; to increase and distribute work animals, coupling the use of animals with maintenance of soil fertility; and to improve, distribute, and spread the use of farm tools and implements." 14/ All this calls for financial assistance, estimated at about 140 million yen. It may be noted in this connection that in the 4-year period 1933-1936 the Manchurian Government, central and local, spent less than 20 million yen on agricultural measures.

Another feature of the Manchurian agricultural program is the promulgation of new measures to control the distribution and sale of rice and fodder. The projected Rice Control Law aims to regulate the export of maize, kaoliang, and other feedstuffs with a view to facilitating the use of such products in Japan. There has also been established the Manchurian Cereals Company for the distribution of cereals in Manchuria. This company is to handle all matters relating to the purchase, sale, export, import, and polishing of rice, as well as the business pertaining to the purchase, sale, export, import, and drying of maize, kaoliang, etc. Producers of rice are not allowed to sell rice to any other than the Manchurian Cereals Company or agencies designated by the company.

As a part of the program bearing upon the utilization of wheat, the Manchurian Government has decided upon a fundamental policy of flour control. The chief features of these measures are, first, the organization of a Flour Producers' Association, the business of which is the allotment of production among members, purchase of raw material, and establishment of a sales-price-equalization fund; second, setting up by the Government of a flour-supply council in order to draft a flour-control plan for the whole country; third, Government encouragement of the use of substitutes for flour when it is deemed necessary; and, fourth, the fixing by the Government of official selling and buying prices for flour.

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14 "Manchoukuo Rediscovers Agriculture," *Far Eastern Survey*, December 7, 1938.

Agricultural colonization of Manchuria - Part and parcel of Manchurian agricultural policies is Japan's program of settling there more than a million Japanese farm families in the next 20 years. According to the Japanese Minister of Agriculture, "Japanese emigration to that vast land means, *inter alia,* the extension of the rural community, which forms the backbone of the Japanese race, a way out of the difficulties arising from the intensive system of cultivation in Japan proper, and the exploitation of natural resources in that latter country." 15/

According to Japanese plans, Manchuria is destined to serve as a safety valve for relieving the pressure on land in Japan. With the major military campaign for the occupation of Manchuria at an end, early in 1932 the Japanese Ministry of Overseas Affairs drafted a plan, containing the following main provisions:

(1) To send a large number of farmers to Manchuria, taking families as the basic unit, owing to the necessity of fostering immigration on the self-sufficing and economically independent basis, and to allot farm lands according to the needs and ability of the households.
(2) To render financial assistance to immigrants.
(3) To encourage immigration of 100,000 families during the first 10-year period. 16/

During the years 1932-1937, a total of only 2,785 families, subsidized by the Japanese Government to the extent of 1,000 yen per family, came to Manchuria. But the Japanese Government refused to be dismayed by this meager result, and in 1937 it drew up a vastly more ambitious program, calling for the resettlement in Manchuria of a million farm households of 5 million people in the course of the following 20 years. More than 20 million acres of virgin land have been set aside for this purpose. In 1938, the Japanese Government planned to settle 15,000 families but succeeded in settling only 1,500. To bolster up the colonization movement, in the same year the Government sent 20,000 Japanese boys, from 16 to 20 years of age, to Manchuria to combine military service with training in agriculture.

It is clear from the foregoing that for the time being measures to mitigate Japan's agricultural crisis through colonization of Manchuria have not been successful. It is worth noting, also, that the attempts of the Japanese Government to populate the island of Hokkaido, which forms the northern extremity of Japan proper, and stimulate emigration to Chosen met with only a limited success. There is no large-scale free flow of migrants, such as characterized the Chinese colonization of Manchuria prior to 1931. Instead, Japanese colonization is essentially an artificial movement, sponsored and financed by the Japanese Government. Low as the standard of living of the Japanese farmer is, that of the Manchurian is still lower. Hence the lack of incentive to migrate there. Furthermore, Japanese farmers are so attached to their own way of living that they are not eager to settle in the virgin and desolate northern regions of Manchuria, even if prospects of improving their economic status seemed more real than apparent.

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15. Arima, Yoriyasu, "Japan's Agricultural Administration," *Contemporary Japan,* September 1937, p. 181.

16. "Immigration of Japanese Farmers into Manchuria," *Contemporary Manchuria,* May 1938, p.42.

Large-scale agriculture - In connection with this program of Manchurian immigration, mechanization of farming on a large scale is being seriously considered. This involves the creation of 55 mechanized farms in North Manchuria of about 10,000 acres each. Half of the total acreage will be cultivated, while part of the remaining half will be utilized for grazing and some of it, for the time being, will remain untouched According to the plans, 10 farms will be established in 1939, and cultivation on all the remaining will begin in 1941. The mechanized farms are intended chiefly for the raising of wheat; and barley, oats, maize, and soybeans will be secondary crops The project calls for the utilization of 150 tractors In addition, the mechanized farms are expected to have a total of 16,500 horses and 11,000 head of cattle

Controlled Expansion in Taiwan

To complete the picture of plans to strengthen Japan agriculturally, reference should be made to Taiwan's 10-year plan for agricultural expansion. The main purpose of the plan is to increase crops that can best be produced in this part of the Japanese Empire and not expand unduly crops that can be produced to better advantage in other parts. Land for rice production in Taiwan is being restricted - the emphasis being on higher yields - and the production of special crops greatly encouraged Rice will be produced on a quota basis to fit into the plans for rice in Japan proper

Specifically, the following increases in yields per acre are projected for the next 10 years Rice, 19 percent; sugar cane, 21 percent; cotton, 38 percent; sweet potatoes, 48 percent; jute, 60 percent; ramie, 77 percent; and castor beans, 300 percent With reference to jute, the plan calls for an increase in jute production so that Taiwan will be able completely to supply Japanese jute requirements, which are in great part now imported from British India It is planned to increase production from approximately 13.5 million pounds to 112 million pounds, and the output of ramie is to be increased from 3 million pounds to 16.5 million pounds In general, the program calls for an increase of some 268,000 acres in arable land

The cotton-cultivation plan is an ambitious one, considering the present status of cotton growing in Taiwan. In 1938, the area under cotton amounted to 12,950 acres, but ultimately this figure is expected to increase to 120,000 acres, 17/ producing about 330 pounds of ginned cotton per acre, or a total of 80,000 bales (of 500 pounds) The realization of the plan would raise the cotton output of Taiwan almost tenfold, but it may be noted that 80,000 bales constitutes only 2.4 percent of Japan's annual cotton demand in peacetime.

CONCLUSION

Upon review of Japan's agricultural policies since the outbreak of the Sino-Japanese war, it becomes evident that the main emphasis has not been placed on relieving the plight of Japanese farmers As in former years, the Government assisted the farmers only by piecemeal and very modest relief measures, supplemented by

17/ The original plan called for 180,000 acres in cotton by 1948.

state-control schemes, principally in the field of price regulation. These were buttressed by constant reiteration on the part of the Government that self-help is the real means of bettering the economic condition of farmers. Such advice, which threw the burden of relief on the farmers themselves, did not involve the Government in any great expenditures; but, on the other hand, self-help was not effective in improving, to any considerable degree, the lot of the farmer.

Vastly more energy has been displayed by the Japanese Government in formulating plans for raising the agricultural output in Japan proper and in territories controlled by Japan; namely Taiwan, Manchuria, and North China. The plans presuppose that the farmer of Taiwan will be willing to shift from his customary growing of rice and sugar to a system of greater agricultural diversification; that the farmers of North China will be ready to do Japan's bidding regardless of their own economic interests; that cotton yields in North China can be greatly increased; that cotton growing in Manchuria can be materially expanded - experience to the contrary notwithstanding; that great numbers of Japanese farmers will emigrate to Manchuria, although in years past they failed to do so. Finally, there is the underlying assumption that a blue print for action is tantamount to action itself.

In view of these limitations, the full realization of the plans may be questioned. It is likely, however, that even partial fulfillment would cause a rise in agricultural output. In that event, a reduction of imports into Far Eastern markets and increased competition in other markets may be expected.

As for the possible effects upon United States exports of agricultural products, it may be noted that, with the exception of cotton, Japan has never been an important outlet for such products, especially in recent years. The discontinuance of exports of rice and wheat from the United States to Japan were doubtless caused by the governmental self-sufficiency policy adopted prior to 1937. Negligible exports of such American commodities as fruit and dairy products were caused by the exceedingly high Japanese customs duties.

As regards cotton, the decline in United States exports to Japan for the time being cannot be attributed to Japan's agricultural plans. To begin with, cotton is not grown in Japan, and in Taiwan and Manchuria only in inconsequential quantities. The cause of restricted imports must be sought chiefly in foreign-exchange-control regulations enacted even prior to the Sino-Japanese war and greatly accentuated since then, and in the decline in exports of Japanese cotton goods.

Japanese plans to secure large quantities of raw cotton in Manchuria and Taiwan hold little threat for American cotton. Of a more serious nature are Japan's efforts to induce the farmers of North China to grow cotton in such volume and of such quality as to meet at least some of the requirements of the Japanese textile industry. To be sure, this development is not one of the immediate future. The acreage planted to cotton in 1938-39 in North China is estimated to have been 40 percent below the harvested acreage of a year earlier. Cotton-improvement work, which was carried on quite extensively by the Chinese Government during recent years, has had little attention since the outbreak of Sino-Japanese hostilities. Even if the Japanese should succeed in establishing firm control in the interior sections of North China, the realization of the 9-year cotton program is not a certainty. The main emphasis, as the program indicates, is upon higher yields. It remains to be seen whether the yield on the existing acreage can be so increased as to take care of the Japanese cotton-expansion program without any considerable increase in acreage.

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PERUVIAN INSTITUTE OF AGRICULTURAL STUDIES

Foremost among the institutions of higher learning of Peru for the pursuit of agricultural studies and research is the Instituto de Altos Estudios Agricolas del Peru (Institute of Higher Agricultural Studies of Peru). Its educational work, research, and extension services spring from the four main divisions of the institution.

These four divisions include (1) the Agricultural Experiment Station, with headquarters at La Molina, (2) the National School of Agriculture and Veterinary Science, also located at La Molina, (3) The Institute of Agricultural Microbiology, Serums, and Vaccines, and (4) The National Meteorological Service, whose headquarters are at the Reserve Park, Lima.

The Agricultural Experiment Station is an agency of considerable significance to the general agricultural welfare of Peru. Its agronomy section makes general and specialized soil analyses and prepares the agrological plans for the country. Experiments are in progress to determine the possibilities of guano and other native compounds as fertilizers. The experiments include also such farm commodities as cotton, wheat, sugar cane, fruit, rice, and truck-garden crops. Many varieties of these have been imported into Peru for experimental purposes in an effort to determine their adaptability to the Peruvian soil and climate and the success of their cultivation under varying conditions.

Some notable results are already apparent from this work. It has been shown that 20 out of 40 varieties of wheat are suitable for cultivation in Peru. New methods have been found for combating the fruit fly, which has been so menacing to orange groves. The cultivation of avocados or aligator pears has been materially improved. Experiments with cotton have shown ways of improving the Tanguis variety. Experiments with rice were recently abandoned in several regions; while the genetic study of sugar cane has now been concentrated in several plantations on the northern coast of Peru, after a series of tests in other regions proved discouraging.

The second division of the institute, the National School of Agriculture and Veterinary Science, performs the regular work of instruction. The school's enrollment in 1936 totaled 188 students. Fifty-six specialized courses were offered, covering about 2,301 hours of class work. This was supplemented by laboratory exercises and field trips to nearby plantations. A considerable part of the field work is performed on the school's own lands, which include approximately 110 cultivated acres.

The Division of Agricultural Microbiology, Serums, and Vaccines has supervision over the biological products imported into Peru. In addition, it is charged with the inspection of the livestock of the country. In its laboratories are prepared the technical reports on livestock diseases and the prescriptions for immunizing compounds for cattle, sheep, horses, and other animals. The National Meteorological Service, the fourth division of the institute, issues a printed monthly summary of the meteorological observations made at its 30 stations located at strategic points of the country.

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EGYPT ENACTS LAW FOR THE REDUCTION OF MORTGAGE DEBTS

The serious problem of land-mortgage debts in Egypt was first considered by the Egyptian Government in 1933, and some arrangements were then made with the three principal mortgage banks for the relief of debtor farmers.

After a long study the Egyptian Parliament passed a law on January 20, 1939, which, while reducing mortgage debts, put an end to the uncertain situation of creditors due to their inability since March 1937 to proceed with the enforcement of their rights. The new law became effective on January 23, 1939, although article 31 provides that bids on forced executions are further postponed until June 30, 1939. The law is somewhat lengthy and contains 34 articles. Its major stipulations are as follows:

> Every debtor, not a merchant, whose real properties are encumbered by one or more mortgages, copied or recorded, affecting cultivated lands or cultivated lands conjointly with urban buildings, may request a reduction of his mortgage and contract debts, even though unmatured, if at least one of the copies or records encumbering one or more of his rural realties is dated prior to December 31, 1932.
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> No reduction of debts will be allowed if the total of the mortgage and other contract debts is not more than 70 percent of the actual sale value of the real properties of the debtor.
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> Mortgage debts that do not exceed 45 percent of the actual sale value of the real properties will not be subject to reduction.
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> In case reduction of debts is permitted, it will be carried out in such a manner as to reduce the total of the debts to an amount equal to 70 percent of the value of the real properties of the debtor.
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> The Commission for the Settlement of Mortgage Debts is established at the Ministry of Finance. The members of the Commission will be appointed by order of the Minister of Finance. The request for reduction must be signed by the applicant, or by a lawyer representing him, and presented to the Commission within 3 months of the publication of the law, under penalty of foreclosure, unless the person interested supplies the Commission with justifications for the delay, recognized as valid.

In case the Commission lacks the necessary information to decide the value of the properties, it may appoint an expert to appraise them.

The loans will be considered as transferred, in the reduced amounts and with the original clauses, to the benefit of the Credit Hypothecaire Agricole d'Egypte (a semigovernmental institution), which assumes all the rights of the creditors.

The sums owing to the creditors shall be paid by the Credit Hypothecaire Agricole d'Egypte either in cash or in obligations issued by it with the guaranty of the Egyptian Government and taken at their nominal value.

An order of the Minister of Finance shall lay down the terms of reimbursement of credits.

In all cases, the interest rate to be paid to the Credit Hypothecaire Agricole d'Egypte on the ceded loans shall not exceed 6 percent per annum.

There is created by the present law, for the benefit of the Credit Hypothecaire Agricole d'Egypte, a mortgage on the real properties that have been the subject of the settlement, to guarantee the contract loans transferred to it.

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SWISS - RUMANIAN WHEAT PURCHASE AGREEMENT

An arrangement modifying the clearing agreement of March 24, 1937, between the Rumanian and Swiss Governments is reported in the Swiss press to have been concluded at Bucharest on May 12, 1939. Negotiations leading to this arrangement appear to have had as their object the revival of trade between the two countries, which has tended to decline in recent months. It was particularly desired to stimulate Swiss purchases of Rumanian products in order to bring the clearing account into better balance. The arrangement, however, appears to be confined to provision for the Swiss purchase of certain quantities of Rumanian wheat. All other major questions, including that of the balancing of the clearing account, are reported to have been left for further discussion.

A maximum quantity of 30,000 tons of Rumanian wheat is involved in this arrangement. The wheat in question is from the 1938 harvest. About 15,000 tons have already been purchased under the arrangement by private Swiss importers; but there is reason to believe that the Swiss will be less willing to take the remaining 15,000 tons on the same terms.

The arrangement intended is to overcome the difficulties arising as a result of the extremely high price of wheat maintained within Rumania. Under the regular clearing agreement, this price is paid in lei obtained at the low agreement rate of 32 lei to the Swiss franc. Purchases have not been attractive on these terms. Under the new arrangement, the Rumanian authorities have consented to permit 30 percent of the contemplated wheat exports to Switzerland to be paid for in free exchange, which runs about 70 lei to the Swiss franc. This is similar to arrangements made by Rumania with the United Kingdom, Belgium, and the Netherlands.

Further negotiations are taking place aimed at the completion of similar arrangements for other commodities, notably oats and barley.

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